D8.4: BOARD GAME

Project acronym: BuildERS
Project title: Building European Communities’ Resilience and Social Capital
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Executive Summary

As a part of the WP8 efforts towards dissemination and reaching the target groups of BuildERS, this D8.4 is designed to reach children, one of the most vulnerable groups in case of disasters. Deliverable builds on case studies produced over the course of BuildERS and covers four different scenarios that are most likely to occur in the countries covered by the project, but that are also relevant for other regions as well. The game has a pedagogical backing and is tested in several camps and schools, reviewed from the ethical standpoint and content-wise by the experts (from the first responder organizations).

The game is originally developed in English and translated to Finnish, German, Italian and Hungarian, to ensure the widest possible use.
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Introduction

Relying on the main topics of BuildERS project - risk awareness, social capital and vulnerability – this Board game focuses on teaching the children aged 5 to 10, who are likely to be vulnerable in case of disasters, how to react and how to spread information to their peers. In BuildERS D1.3: Report on Segments of Vulnerability Country by Country Basis – Inside and Outside: the Official Data, vulnerability is defined as situational and dynamic. Yet, independently from the type of crisis presented in Chapter 4 of the same report, elderly, children, and people with disabilities are recurring groups impacted by the crisis in all the 8 countries that were subject to analysis. Children are also identified as one of the aggregated social groups who are considered vulnerable in most of the countries. However, the game takes into consideration the dynamic definition of the vulnerability from WP1 as well, including the elements of intersectionality with children living in more disaster prone areas (flood scenario) or with different levels of preparedness (earthquake scenario). This definition also stretches through WP3 and shows that even the care-giving system can become vulnerable, and this game not only teaches pupils how to react in disasters, but reminds teachers of their role as well.

This game is focused on explaining the children in lower grades of elementary school the steps to be taken in case of emergency situations focusing on natural disasters or other events. Four different scenarios have been developed, based on the disasters described by the case studies within BuildERS and most likely scenarios to happen in countries covered by the project. The game is developed in English and will be translated into German, Italian, Finnish and Hungarian. So far, it has been tested in Hungary in two schools and two camps through the activities of the Hungarian Charity Service of the Order of Malta.

1.1. Theoretical background and pedagogy

Game-based learning refers to the borrowing of certain gaming principles and applying them to real-life settings to engage users (Trybus 2015). It is well known that knowledge is obtained faster and retained longer if the teaching methodology is interesting and engaging. The growing popularity of hands-on or experiential learning where knowledge is believed to be created through the transformation of “experience” has introduced a shift from authority- and lecturer- based teaching and learning to more engaging approaches in which a strong emphasis is put on emotional aspects, peer-to-peer relationships, horizontal communication and active cooperation. This participatory style of education has laid the groundwork for using games/simulations as an alternative or complementary teaching tool for enhancing skills useful for a collaborative and adaptive response to social-ecological challenges (Solinska-Nowak, et al., 2018).

Games have been found to be particularly effective in: promoting skill acquisition, knowledge retention, attitudinal change, supporting understanding of new concepts and ideas, shaping behaviour, and improving context-based problem solving (Klabber, 2003; Mateas, 2003; Prensky, 2001; Ricci, Salas & Cannon-Bowers, 1996). In the context of disasters in particular, games can be a way to introduce complex and difficult topics and provide a learning curve based on motivating and engaging approach. In “Games for a New Climate: Experiencing the Complexity of Future Risks” (Suarez, Suarez, and Bachofen, 2012), authors deal with games related to challenges brought about by climate change. According to them, decision science has shown elegantly and irrefutably that experience, because of the emotional pathways it triggers, is a much better teacher than exposure to information. In the context of natural disasters - a topic that BuildERS is tackling as well - they emphasize that the trial and error is an effective way of gaining experience and knowledge, but can potentially be harmful or even lethal in real life situations. Herein lays the usefulness of game-based learning. As games can simulate or describe changing conditions, plausible decisions, and related outcomes, they can prepare people for critical
decisions that need to be made right to avoid creating (or worsening) damaging future consequences. (Suarez, Suarez and Bachofen, 2012). BuildERS game introduces basic concepts, tools and behaviours in four different disaster scenarios, adjusted to the target age of 5 to 10. Within the game, questions and challenges are developed that provide learning about steps, decisions and choices that should be made/taken in case of a disaster, emergency or a health hazard. The board game developed within BuildERS can be used both in the classroom during traditional classes or during extracurricular activities and informal education – summer schools, educational camps, youth workshops etc.

In BuildERS D1.2: Final Report of the Unified Theoretical Framework on the Concepts of Risk Awareness, Social Capital, Vulnerability, Resilience and Their Interdependencies, various definitions of social capital are analysed and presented. One of the definitions mentions “bonding capital/networks (family, closest friends)” and the idea of group work in the BuildERS game relies on this premise, that “crises and disasters demand communities to perform collective action, social linkages, relational trust, and internal and external relationships and are important in the overall disaster management process” (Wood et al., 2013). Even if this definition may presume higher levels of collective action, learning about cooperation and trust at such a young age can influence resilience in disaster situations. The game takes into consideration communicative vulnerabilities from WP2 as well and especially emphasizes the importance of following official guidelines and mainstream media in such situations.

The motivational psychology involved in game-based learning allows students to engage with educational materials in a playful and dynamic way (Pho and Dinscore 2015). Some advocates make the case that game-based learning involves processes that differ to such an extent from learning in other forms (such as classroom instruction) that they should be described as a unique model or theory of learning (Gee, 2003; Prensky, 2003). Teaching children at lower grades of elementary school about potential hazards that can lead to injury or death can be a challenging task in a traditional setting. Disaster Risk Reduction can seem like an abstract concept to children until it is put directly in context with their day-to-day experiences (The International Federation of Red Cross and Red Crescent Societies). As BuildERS D1.2 explains, risk perception plays an important role in disaster risk management and crisis management. Poor and biased risk perceptions (too high or too low) may be both the cause of under- or over-reactions when a crisis unfolds, determining delayed responses or panic and irrational behaviours, and, in general, inappropriate or even harmful behaviour. However, learning through play facilitates introducing these concepts in an innovative and motivational manner, helping the teacher/educator to engage learners with a new methodology compared to the traditional lectures. According to Humanitarian user research on serious games, 84.5% of participants felt that learning games were more effective than PowerPoint slides or lectures when learning the relevant subject matter (Stevens and Fisher, 2020).

Virtual games can be found online covering these topics (Legends of Learning, Stop Disasters, etc.), but they are different for several reasons. For example, Legends of Learning is focused on showcasing the knowledge on natural disasters, but fighting them in the virtual world with fictional, non-realistic powers (energy, resources). The quizzes and the information gained on natural disasters in this game are valuable, but the goal is to learn only about hazards, little is learned about how to respond in real-life situations. Comparably, Stop Disasters, developed by UNDRR, builds knowledge for the future: “Children are the future architects, mayors, doctors, and parents of the world of tomorrow. If they know what to do to reduce the impact of disasters, they will create a safer world.” The game teaches how to build safer cities and villages, which materials to use, etc.

This is where the BuildERS board game differentiates. The goal of the game is to teach children 5-10 years old how to recognize that they are vulnerable in certain situations and react in immediate danger of the respective disaster scenario: fire, earthquake, flood, pandemic. Game-based learning is not just creating games for students to play, it is designing learning activities that can incrementally introduce
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Concepts, and guide users towards an end goal (Pho and Dinscore 2015). The feedback loop, crucial to game-based learning, and competition between teams, but with a common goal, to win against the incoming danger, are major elements of learning through play and these were the guiding concepts when developing the BuildERS game.

When designing an educational game we have to reflect upon didactical approach and related topics. We have to create the situation asking: “What do we want that learners learn?” (Pivec, Dziabenko and Schinnerl, 2003). According to them, there are different opinions about what the game characteristics are. Thornton et al., (1990) claim that interactivity is an essential aspect of a game. Johnston et al. (1993) suggested that the visuals, rules, goal and interaction are the essential features. When determining pedagogical approach, we were deciding how the learning takes place. In this light, the instructions for the educators divide the game into two levels of difficulty: one for age 5 to 7, the second for the age 8 to 10. These levels have different sets of questions and challenges and the teacher/educator can increase the difficulty or add more obstacles on the way as the learning reaches a certain point. What we wanted the learners to learn was a set of reactions and decisions in four different scenarios and the complexity of these decisions increases with the age group or changes as the group can collectively overcome these challenges (as the learning curve increases). On this path, students can fail and learn, the teacher can assess how many times to repeat a question or a challenge until the lesson is learned. “The capacity to safely fail in serious games is a key component of their value as a learning tool. Failure has been identified as an integral part of learning” (Anderson et al. 2018).

We decided that with this board game, we want to include schools and children of different profiles, from the most remote and disadvantaged to regular ones in urban environments. For this reason, all of the materials, from the board to instructions and characters moving around the board, are printable and easily assembled. The idea was that any teacher or educator can afford to print out papers within the institution and later engage children in assembling them. Additionally, the board is semi-coloured with the intention that after assembling it, the children can personalize it (colour it, potentially making it look like their own school/town/village) and connect more to the game itself. According to Stanford children’s health, children 6 to 7 like to paint and draw, can explain objects and their use and like to play board games. The pedagogical approach of BuildERS board game relies on these milestones: engaging children through “building” the board themselves, using tools within the game to explain how they can be used in the case of emergency and creating challenges and questions within the board game that can be repeated until learned.

As for the second level of difficulty, in this case aimed at children aged 8 to 10, Health Link British Columbia explains that in this period children gradually become able to consider several parts to a problem or situation. This is a change from the simplistic thinking of a pre-schooler. With this in mind, the game becomes more complex, as the teacher can introduce more difficult questions and challenges. However, the same article suggests that “even though their thinking becomes more complex, children in this age group still think in concrete terms”. The game sticks to the same scenario throughout, a fictional situation is described as authentic as possible and is explained at the beginning and all the challenges relate to it. The characters are the same from the start and children can easily follow their progress on the board. The tools are clearly drawn and there are no words on the board or the moving cards, while the questions and challenges are administered by the teacher/educator. The questions and challenges are clear and concrete, keeping the game tangible and understandable for the age range in question. The end goal is creating a mental pattern that can be repeated in real-life cases of disasters: choosing a proper tool, path or a person to trust. Situated Learning Theory (SLT) suggests that people learn better when placed in authentic contexts to perform actions that parallel real world tasks, interacting with others and applying knowledge. Games apply these theories by creating experiences (Stevens and Fisher, 2020). The interaction with peers and collective decision making (in smaller groups) creates situational
learning, forming situations that would happen in real disasters: following the proper authority, staying together in groups, helping peers, etc. It is important to emphasize that “a single experience is generally not enough to enable a permanent change. Learning is an incremental experience, building on previous experiences” (Turoff et al., 2006; Turoff et al., 2005). BuildERS game was built on this premise: the game can be played over and over, while the questions and challenges repeat in a different order, with different groups that have changing tools available to them. Children learn through repetition, but always in a different set up, obtaining comprehensive knowledge and building responsiveness for various situations.

Humanitarian user research on serious games concludes that “interest in games and self-reported learning from serious games was not gendered: men and women were equally excited, engaged, and learning. Age proved to be a minor determinant of enthusiasm and engagement.” (Stevens and Fisher, 2020). The game has two main characters, a female and male, classmates and friends who are making decisions along the game. They both find themselves in front of various challenges and dilemmas and depending on the scenarios, they interact with other family members or older persons of authority (teachers, firefighters). We were mindful of the gender representation and the game is created to be equally attractive for both boys and girls.

Psychologists have long acknowledged the importance of play in cognitive development and learning (Plass, Homer and Kinzer, 2015). Piaget (1962), for example, described play as being integral to, and evolving with, children’s stages of cognitive development. Building resilience and managing information disorder as some of the main objectives of BuildERS are embedded in the pedagogy of this game. In BuildERS D1.2, it is stated that to support the development of rational and reasonable risk perception among individuals might be the key to motivate risk reduction behaviour. Adopting correct patterns of behaviour at this age is crucial for both resilience and ability to recognize false information and BuildERS game tackles exactly those capacities. The teacher/educator is able to adjust the game to increasing knowledge of the pupils and add on more advanced elements. As per BuildERS definition, resilience is the process of patterned adjustment and adaptation enacted in the face of risks, crises and disasters. Resilience needs to be built in all phases of the crisis management cycle to make individuals, groups and societies more robust in facing future risks, crises and disasters. Using game-based learning at an early age to build this adjustment through collaboration and in a motivating manner is the goal of BuildERS board game.

The game instructions are straightforward for the teacher and there is no need for additional training, as the pilots in Hungary showed. The next steps are translating the game to German, Italian, Finnish and Hungarian and promoting it in various schools and camps.

2. Game scenarios

The following is the material that will be divided into 4 separate games to be distributed to schools and teachers. The background story will be repeated at the beginning of every game, while a specific scenario will follow. The actual printed materials for the game are in annexes, but this part contains instructions for teachers and explanations they should give the pupils after each question/challenge is resolved.

2.1. Background story for all the games

Nick and Vicky live in nice village called DisasterVille. While their home is a great and beautiful place, sometimes the inhabitants’ of DisasterVille would face some hazards in their home, for instance: wildfires, floods, earthquakes or even pandemics. However, Nick and Vicky quickly learned that if their
community is well-prepared, organized and well-informed they are less likely to become vulnerable in these situations. So, with disaster preparedness they will be able to respond more efficiently in case of an emergency while also be able to help their friends in need when exposed to these hazards. Let’s see how well they know what to do in these tricky situations, and what we can learn as well!

There are four disaster scenarios you can choose from: Fire, Flood, Pandemic, Earthquake.

2.2. Fire game scenario

2.2.1. Fire game background story

Vicky and Nick go to the same school in their village. One day during math class they heard the smoke alarm go off. They knew that the alarm means that they must quickly leave the building following the exit signs. After escaping the building, they met all their other classmates and teachers at the designated safe meeting area. When they looked around, they realized that the smoke was coming from a wildfire in the forest surrounding their village quickly reaching the nearby houses. Wildfires are fires that burn out of control and spread very quickly. Fortunately, during their disaster preparedness classes Vicky and Nick learned what they should do in case of any fire emergency. They explained to their classmates that in case of a quickly spreading wildfire they need to immediately evacuate the whole village and go to the shelter.

Help Vicky, Nick and their friends and family get to the shelter as quickly as possible before the fire reaches their village. You will also need to make sure that the firefighters reach the area that is on fire to help extinguish it. With your knowledge, you should also help the doctors get to the hospital to help anyone who got injured during the fire.

Phrases to learn: exit sign, smoke and fire alarm, fire extinguisher, firefighter, fire safety

2.2.2. Game instructions for teachers/educators/parents

The scope is to teach the children about disaster management, acquire the basic knowledge and skills. They will play together, forming a team and fight together against the fire.

If we are playing the game with children aged 5-7, it is advisable to choose the simple version, playing only the “Pair the cards challenge” as indicated their age and later add questions and challenges.

For older children (in the case of children aged 8-10 or older) we have the opportunity to expand and complicate the basic game with additional questions, challenges and action tasks.

The game can be played by 3-5 children or 3-5 groups of children. When you play the game with groups of children, use the questions and/or challenges as well, so all kids can feel involved into the game. The groups may receive a challenge or question together.

The basic game instructions are the following:

1. Put the game board together by the numbers. The children can colour it more and make it look like their own village/city. Place the small moving cards upside down. The 4 players (doctors, firefighter, fire, family) should be placed at the corresponding starting point to start the game.
2. If the group is large, divide them in teams of two or more, depending on the size of the group.
3. The first player starts and turns a small moving card over which will show the moving steps and what needs to be moved (which player and how many steps). Move the corresponding character. Then put the small card aside.

4. When a player steps on a question or challenge card, turn up a card from the relevant package of cards and answer the question/challenge.

5. When a player arrives to the destination, the next fire card turned up will mean that steps should be taken backwards for the fire character, not forward. This is the reward for the teams for completing the path.

6. If the fire completes the path before all other would arrive to their destination, all players lose the game. All three other characters (doctors, firefighter, family) must arrive to the destination before the fire arrives, to avoid the disaster and put out the fire completely and thus win the game.

Figure 1: Fire board
Pair the cards challenge – for smaller children (5-7 age group and as a start/addition for age 8-10)

Prepare the pair cards and shuffle them. Each group of kids will get a number of cards that will be showing various images that need to be connected. Put some challenge (small) cards (select as many as you feel adequate to the level of knowledge of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up/select a pair card – ask the children to connect it with the proper image. After they do, read the explanation below.

1. Fire extinguisher – Fire
   Explanation: Fire extinguisher is a device that is used to control and put out fires. If there is an adult with you, they should use the extinguisher. Remember the most important is that you stay safe and get away from the fire immediately.

2. Heat resistant blanket – stove on fire
   Explanation: ‘Heat resistant blankets’ or ‘fire blankets’ are used to extinguish small fires in the home. They can also be used to wrap around a person whose clothes are caught on fire. Fire blankets are usually stored in the kitchen where they can be quickly used during a kitchen fire for example putting it over the stove. You always need to be careful to turn off every appliance in the kitchen after using them.

3. Matches – Adult
   Explanation: Matches and lighters are not toys. These should always be stored in a safe place, but if you still find matches you always have to give it to an adult. In case your brother, sister or a friend found the matches you have to do the same.

4. Mobile with 112 – building on fire
   Explanation: In case of an emergency, you need to call 112 which is the emergency number. You must only dial this number in case of a real emergency. You will need to tell the dispatcher what happened, what is the address and if there are any people hurt.

5. Towel – Tap with water coming out
   Explanation: A wet towel (or piece of clothing, blankets, sheet etc) placed over your mouth will help to decrease the chances of breathing in the smoke. If you are unable to leave a room, you can also use it to block the cracks around the door to stop the smoke entering your room.

6. Smoke alarm – batteries
   Explanation: When a smoke alarm goes off you need to get outside as quickly as possible (less than 2 minutes). If you see smoke ‘get low and go’, stay close to the floor where the air is cleaner. With the help of your family, you need to test your smoke alarm once a month and change the batteries if necessary.

7. Exit sign – running person
   Explanation: If there is a fire emergency you need to leave the building as quickly as possible (less than 2 mins). For the safest escape route, you need to follow the exit signs and get outside. Once outside go to the safe meeting place and stay there.

8. Doorknob – hand
   Explanation: If a doorknob is hot don’t open the door as it can cause the fire to spread. Use a towel or a cloth to touch things to avoid burns. Try to find another way to go outside but if you can’t get out of the house you should stand by the window where firefighters can see you.
9. Fire fighter – helmet
   Explanation: Firefighters have to wear a special protective gear that guards them from heat and flames. Helmets protect firefighters’ head from the fire, falling debris and extreme temperatures. It also protects the firefighters’ ears and eyes.

10. Fire hose – fire hydrant
    Explanation: Fire hydrants are usually found on streets, parking areas, roadsides. They are designed to instantly provide water for the firefighters to extinguish a fire. The firefighters attach the fire hose to the fire hydrant to deliver the right amount of water to put out the fire.

11. Medical kit – doctor
    Explanation: A medical or first aid kit is a collection of supplies and tools that is used to give medical treatment. In most medical kits you will find the supplies to treat cuts, burns, scrapes, sprains and other injuries. The medical kit usually included things like bandages, band-aids, antiseptic cream. Always remember to call an adult or a doctor if you have a serious injury.

12. Window – kid opening the window and waving with a cloth
    Explanation: If you can’t get out of the house by going downstairs you should go to a safe room and close the door and stand by the window. You need to make sure that you are seen or heard by the firefighters so they can come and help you.

13. Running down the stairs with a tick – kid under table crossed out
    Explanation: If a fire breaks out, you have to get out of the building. Run down the stairs! If there is a lot of smoke there, bend down and go out on all fours or even crawl, but don’t hide anywhere indoor.

14. Rolling on the ground - kid with clothes on fire
    Explanation: If your clothes catch on fire and you are unable to take them off you need to ‘Stop, Drop and Roll’. Stop, Drop and Roll means stopping where you are, dropping on the floor and covering your face with your hands, while rolling back and forth until the fire has been put out. Running only makes the fire get bigger. Rolling on the ground is the quickest way of putting out the flames.
Questions – for children of age 8-10

Prepare the cards with questions. Put the question (small) cards (select as many as you feel adequate to your group of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up a question card with the instructions – ask the children to reply, then read the explanation.

1. Q: Can you list at least 3 ways that can help you to extinguish fire?  
   A: water, fire blanket, sand, fire extinguisher

   Explanation: You can use several tools to extinguish a fire. If there is an adult with you, they should use the extinguisher. Remember the most important is that you stay safe and get away from the fire immediately and call out for help.

2. Q: When escaping from smoke what do you do?  
   A: 1. hide under table  2. crawl on the floor  3. stand tall

   Explanation: When escaping a building on fire you need to remember that smoke can be just as dangerous as fire. If you see smoke you need to crawl on the floor as the smoke rises, leaving more smoke-free air to breathe closer to the ground. If it’s not possible try to cover your mouth and nose with a wet towel that will help to decrease the chances of breathing in the smoke.

3. Q: Vicky and Nick safely escaped the burning building, but their pet is still inside the burning building. What should they do?  
   A: 1. call out for help,  2. go back inside for the pet,  3. run away and hide

   Explanation: After escaping the building on fire you need to go to a safe area where you are easily seen by adults or the firefighters. You should never go back into the burning building even if you have a pet or any other item inside. If there is a pet inside, you should inform the firefighters who are present at the fire instead of attempting to rescue the pet yourself.

4. Q: How to prepare your home for a potential fire? List at least 3 things.  
   A: Making sure we know the escape routes, window bars can be open from inside, corridors and stairs are clear, learn how to move when there is smoke and/or fire, set up smoke alarms and/or fire alarms, dangerous materials should be kept safely, get a fire extinguisher.

   Explanation: Preparedness is very important in order to learn how to stay safe when emergencies happen. Preparedness includes learning how to behave and what to do also what not to do in case of an emergency. This game will help you to be more prepared in case of a fire emergency.

5. Q: If you are unable to leave the house and you have to stay in a safe room during the fire where should you go to be seen?  
   A: 1. under the bed  2. hide in the wardrobe  3. stand by the window

   Explanation: If you can’t get out of the house you should go to a safe room and close the door and stand by the window. You need to make sure that you are seen or heard by the firefighters so they can come and help you.

6. Q: If you are unable to leave the house and have to stay in a safe room during the fire, what could you do to stop the smoke entering the room?  
   A: 1. Block the gaps around the door with clothes, towels, blankets,  2. close the door with a key,  3. Block the gaps around the door with books and magazines
Explanation: A wet towel (or piece of clothing, blankets, sheet etc) placed over your mouth will help to decrease the chances of breathing in the smoke. If you are unable to leave a room, you can also use it to block the cracks around the door to stop the smoke entering your room.

7. Q: Can you list at least 5 causes of fire?
   A: Candle left unattended, children playing with matches, cigarettes, kitchen fire, matches, hair dryers left unattended, hair straighteners left unattended, overloaded electric sockets, campfire left unattended

Explanation: Fire safety education is also fundamental in preventing fires from starting. You need to remember to stay away from anything that can start a fire such as matches, lighters or candles. This also includes the kitchen stove, fireplace, space heaters, irons and other hot appliances.

8. Q: You must only use the emergency number in case of an emergency. What is the emergency number?
   A: 112, 911, 999

Explanation: In case of an emergency, you need to call 112 which is the emergency number. You must only dial this number in case of a real emergency. You will need to tell the dispatcher what happened, what is the address and if there are any people hurt.

15. Q: What should you do if there is a fire in your home?
   A: 1. run out of the house and call the emergency number  2. hide in your room  3. wait for your parents to come home

Explanation: If a doorknob is hot don’t open the door as it can cause the fire to spread. Use a towel or a cloth to touch things to avoid burns. Try to find another way to go outside but if you can’t get out of the house you should stand by the window where firefighters can see you. If you are safe outside you need to call 112 the emergency number.

9. Q: Is crawling under smoke safer than walking through it?
   A: Yes/No

Explanation: When escaping a building on fire you need to remember that smoke can be just as dangerous as fire. If you see smoke you need to crawl on the floor as the smoke rises, leaving more smoke-free air to breathe closer to the ground.

10. Q: Why running is a bad idea if your clothes are on fire?
    A: Running will only fan the flames.

Explanation: Running will give more oxygen to the fire and very likely make it more intense and
injurious.

11. Q: Vicky and Nick are in the classroom and they see firefighters through the closed windows. What should they do?
A: 1. Wave to them through closed windows, 2. Try to run down to them, 3. Open the windows, wave and wait for the instructions from the firefighters on what to do

Explanation: If you can’t get out of the building you should go to a safe room and close the door and stand by the window. You need to make sure that you are seen or heard by the firefighters so they can come and help you. Remember, that you should never try to hide away from the fire!

12. There is a fire emergency in the summer, Vicky has short sleeves, but she also has a hoodie in her backpack. What should she do?
1. Leave the hoodie in the bag, 2. Put the hoodie on to cover the skin

Explanation: During a fire emergency it is important that you cover as your skin as much you can to avoid burns.

13. Q: Nick is in the corridor of the building and there is a fire. How should he leave the building?
A: 1. Take the elevator, 2. Follow fire exit signs and go down the stairs if it is not blocked

Explanation: If there is a fire emergency you need to leave the building as quickly as possible. Follow the exit signs to the safe meeting area outside. Remember, that you should never hide away even if you are scared because the firefighters may not find you then. Also, when you are escaping the building on fire you should never use the elevator, always take the stairs instead.
Challenges – select a tool – for children of age 8-10

You may decide to make the game more complex and use not only question cards, but challenge cards as well. Put as many as you think is adequate to your group of children and play the game as before. When they step on a challenge, turn up one challenge card with the instructions. The tools may be distributed to the groups and in case the tool is not with their group, they can exchange and negotiate!

a. Vicky remembers that last year there has been a firefighter who came to the school and taught them about fire safety. Choose one tool that the firefighter explained should be used to put out a fire.
   i. Fire extinguisher

Explanation: Fire extinguisher is a device that is used to control and put out fires. If there is an adult with you, they should use the extinguisher. Remember the most important is that you stay safe and get away from the fire immediately and call out for help.

b. Vicky and her parents were cooking dinner when suddenly a fire starts in the kitchen. Choose the tool that Vicky should put over the kitchen fire to stop it from spreading.
   i. Heat resistant blanket

Explanation: ‘Heat resistant blankets’ or ‘fire blankets’ are used to extinguish small fires in the home. They can also be used to wrap around a person whose clothes are caught on fire. Fire blankets are usually stored in the kitchen where it can be quickly used during a kitchen fire for example putting it over the stove. You always need to be careful to turn off every appliance in the kitchen after using them.

c. There is a fire in Nick’s and Vicky’s village. They need to leave their homes and go to a shelter outside their village. Choose a tool that they should take with themselves to the shelter.
   i. Drinking water

Explanation: In case of a fire, you shouldn’t go back to the house for any objects and not even your pet. If a whole neighbourhood, or in this case the whole village, is on fire you and your family should go the shelter. Shelters are a safe place where people can stay while the emergency situation persists. While staying at a shelter, people make sure to have water to drink, food to eat, clothes to wear and a safe place to sleep.

d. Nick and Vicky are walking home from school and notice that one of their friends’ house is on fire and their friend looks hurt. Choose the most useful tool they can help their friend with before a doctor arrives.
   i. Medical kit

Explanation: A medical or first aid kit is a collection of supplies and tools that is used to give medical treatment. In most medical kits you will find the supplies to treat cuts, burns, scrapes, sprains and other injuries. The medical kit usually included things like bandages, band-aids, antiseptic cream. Always remember to call an adult or a doctor if you have a serious injury.

e. Nick is living in the next village and he sees the forest on fire moving towards Vicky’s village. Choose the tool Nick will have to use to alert the fire department.
   i. Mobile with 112
Explanation: In case of an emergency, you need to call 112 which is the emergency number. You must only dial this number in case of a real emergency. You will need to tell the dispatcher what happened, what is the address and if there are any people hurt.

f. Nick is in the school's gym when he is starting to smell a little bit of smoke and he is staring to cough. Use the best tool you can to cover Nick's face when he is escaping the building.
   i. Wet towel

Explanation: A wet towel (or piece of clothing, blankets, sheet etc) placed over your mouth will help to decrease the chances of breathing in the smoke. If you are unable to leave the room, you can also use it to block the cracks around the door to stop the smoke entering your room.

g. Vicky is at her school classroom when she starts to smell smoke and hear an alarm sound. Choose the tool that she is hearing.
   i. Smoke alarm

Explanation: When a smoke alarm goes off you need to get outside as quickly as possible (less than 2 minutes). If you see smoke 'get low and go', stay close to the floor where the air is cleaner. With the help of your family, you need to test your smoke alarm once a month and change the batteries if necessary.

h. Nick and Vicky are at school when suddenly the fire alarm goes off. They have to quickly escape the building and go to the safe meeting area outside. Pair the tool that shows what way they should follow.
   i. Exit sign

Explanation: If there is a fire emergency you need to leave the building as quickly as possible (less than 2 mins). For the safest escape route, you need to follow the exit signs and get outside. Once outside go to the safe meeting place and stay there.

   i. There is a fire in Nick's house. Nick's escape route is blocked by a door. A firefighter has entered the building to help Nick escape. Choose the most helpful tool that will help the firefighter remove the barrier between him and Nick.
      i. Axe

Explanation: Firefighters have to wear a special protective gear that guards them from heat and flames. They are also equipped with tools such as an axe, flashlight or a two-way radio. Firefighters use the axe to gain entry into a building or remove any obstacle from the exit route.
**Action Challenges – for children of age 8-10**

*If you have a group of children who could move in the room, you may decide to mix up action challenge cards with the Tools challenge cards. Again, put as many as you think is adequate to your group of children and play the game as before. When they step on a challenge, turn up one challenge card with the instructions. They should not only answer, but also show what should be done.*

1. **Q:** Put it on order what should you do if your clothes catch on fire, and you are unable to quickly take them off?
   **A:** 1. Stop drop and roll on the ground, 2. call for help, 3. run to find water

   **Explanation:** *Stop, Drop and Roll* means stopping where you are, dropping on the floor and covering your face with your hands, while rolling back and forth until the fire has been put out. Running only makes the fire get bigger. Rolling on the ground is the quickest way of putting out the flames.

2. There is a fire in Vicky’s school and one of her friend’s clothes catches on fire. Vicky helps by putting and taping a blanket over her friends to put out the fire. Act out running for the blanket and tap the person lying on the floor whose clothes are on fire.

   **Explanation:** The fire cannot continue if it does not have oxygen. The blanket will cut off the oxygen and the fire will stop.

3. What is the key information you need to tell the dispatcher when making an emergency call? Act out making the call with adding: your full address, description of the emergency, tell if there are any people hurt or in danger.

   **Explanation:** In case of an emergency, you need to call 112 which is the emergency number. You must only dial this number in case of a real emergency. You will need to tell the dispatcher what happened, what is the address and if there are any people hurt.

4. Take a piece of paper and draw your escape route from your classroom to the outside. On your drawing you should also indicate where the safe meeting area is.

   **Explanation:** If there is a fire emergency, you need to leave the building as quickly as possible. Follow the exit signs to the safe meeting area outside. Remember that you should never hide away even if you are scared because the firefighters may not find you then. Also, when you are escaping the building on fire you should never use the elevator, always take the stairs instead.
2.3. Earthquake game scenario

2.3.1. Earthquake game background story

During the summertime, in Nick’s and Vicky’s village, schools are closed and the village has organised different indoor and outdoor activities to entertain the kids of the village and keep them busy. Together with other kids, Vicky and Nick are happily spending their time in a playground surrounded by tall trees. Suddenly, they feel the ground shaking! Nick and Vicky understand quickly that an earthquake is happening. They have to act fast but first they need to wait for the earthquake to stop and protect their heads. Fortunately, during their disaster preparedness classes Vicky and Nick learned what they should do in case of an earthquake emergency. They will explain to the other children that in case of an earthquake they need to immediately protect themselves and go to the nearest square.

Help Vicky, Nick and their friends and family get to the main square. You will also need to make sure that the firefighters reach the village to help the rescue process, while also helping the doctors get to the hospital in order to help anyone who got injured during the earthquake.

Phrases to learn: aftershock, drop cover and hold on, whistle, evacuation route, collapsed building

2.3.2. Game instructions for teachers/educators/parents

The scope is to teach the children about disaster management, acquire the basic knowledge and skills. They will play together, forming a team and fight together against the fire.

If we are playing the game with children aged 5-7, it is advisable to choose the simple version, playing only the "Pair the cards challenge" as indicated their age and later add questions and challenges.

For older children (in the case of children aged 8-10 or older) we have the opportunity to expand and complicate the basic game with additional questions and challenges.

The game can be played by 3-5 children or 3-5 groups of children. When you play the game with groups of children, use the questions and/or challenges as well, so all kids can feel involved into the game. The groups may receive a challenge or question together.

The basic game instructions are the following:

1. Put the game board together by the numbers. The children can colour it more and make it look like their own village/city. Place the small moving cards upside down. The 4 players (doctors, firefighter, earthquake, kids) should be placed at the corresponding starting point to start the game.
2. If the group is large, divide them in teams of two or more, depending on the size of the group.
3. The first player starts and turns a small moving card over which will show the moving steps and what needs to be moved (which player and how many steps). Move the corresponding character. Then put the small card aside.
4. When a player steps on a question or challenge card, turn up a card from the relevant package of cards and answer the question/challenge.
5. When a player arrives to the destination, the next earthquake card turned up will mean that steps should be taken backwards for the earthquake character, not forward. This is the reward for the teams for completing the path.

6. If the earthquake completes the path before all other would arrive to their destination, all players lose the game. All three other characters (doctors, firefighters, kids) must arrive to the destination before the earthquake arrives, to avoid the disaster and win the game.

Figure 2: Earthquake board
Pair the cards challenge – for smaller children (5-7 age group and as a start/addition for age 8-10)

Prepare the pair cards and shuffle them. Each group of kids will get a number of cards that will be showing various images that need to be connected. Put some challenge (small) cards (select as many as you feel adequate to the level of knowledge of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up/select a pair card – ask the children to connect it with the proper image. After they do, read the explanation below.

1. Emergency kit – Shelter
   Explanation: It is always good to have an emergency kit prepared in the house and take it with you in case there is an emergency and you need to go the shelter.

2. Earthquake - Kid under table
   Explanation: In case of an earthquake if you are inside you need to DROP to the ground on our hands and knees, so you won’t fall down from all the shaking. You need to choose a safe place away from anything that could fall down and hurt you. Don’t forget to move away from windows as those might break. After you found a safe place, find cover. If you can, get under a sturdy piece of furniture like a desk or table. COVER your head and neck with one hand, and HOLD ON to whatever is covering you. If you aren’t under anything, hold onto your head and neck with both arms and hands.

3. Rescue team (firefighter, doctor, police) - Mobile with 112
   Explanation: In case something happens in the earthquake or in general, you should know the number of firefighters, police and doctor and this is 112.

4. Windows - Broken glass on the window
   Explanation: In the earthquake, windows can break and the glass could hurt someone, try to stay as far from them as you can.

5. Falling object from shelves - Book
   Explanation: Just like windows, shelves can break too or have books and other objects fall. Be careful where you stand during the earthquake, it shouldn’t be close to anything that can fall.

6. Flashlight - Kid holding a flashlight
   Explanation: Sometimes in an earthquake electricity goes off! Try to find a flashlight or something with light (like a mobile phone) and find adults in your house.

7. Exit sign - Evacuation route
   Explanation: The schools have exit sign in case of an emergency. After an earthquake, you can follow the exit signs to exit the building and go to an open space waiting for further instructions.

8. Collapsed building - Person running away from that building
   Explanation: If you are outside during an earthquake move away from anything that can fall or collapse on you such as trees or building.

9. Elevator (wrong) - Person walking down the stairs (right)
   Explanation: Do not take the elevator during the earthquake as it can stop working or the electricity may go off. Use stairs if you are able to or special exit if you are in wheelchair. Follow the adults or ask them for help if you are not sure where to go or not able to go out on your own.

10. Whistle - Kid blowing the whistle
Explanation: If you are blocked in a house, give a sign to the rescue team of your location by using a whistle.

11. Bottle of water - Kid drinking water
Explanation: It would be good to always have water in your backpack in case there is an emergency and you need to quickly go out.

Questions – for children of age 8-10
Prepare the cards with questions. Put the question (small) cards (select as many as you feel adequate to your group of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up a question card with the instructions – ask the children to reply, then read the explanation.

1. Q: How long does an earthquake usually last?
   A: 1. few seconds to several minutes, 2. days, 3. hours
   Explanation: Earthquakes can last from a few seconds to several minutes and usually start with a rumbling noise.

2. Q: What's an aftershock?
   A: 1. collapsed buildings, 2. smaller shakes after the earthquake, 3. landslide
   Explanation: Aftershock is another, usually smaller earthquake that can happen after a big earthquake. They can also be dangerous and cause more damage so you need to be very careful during aftershocks as well. Depending on the size of the main earthquake, aftershocks can continue for weeks or even months.

3. Q: Vicky is in her home and suddenly she feels an earthquake, what should she do?
   A: 1. Run outside the house, 2. Stand by the window, 3. Drop, Cover, and Hold On
   Explanation: If you’re inside, drop to the ground and take cover under something sturdy like a desk or table. With one hand hold on to the object and with your other arm protect your head and neck. If you don’t have anything sturdy to take cover under, crouch down next to an interior wall. Stay indoors until the shaking stops and you’re sure it’s safe to exit.

4. Q: Do you know what are landslides, and why are they dangerous?
   A: A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. An earthquake can trigger landslides which can move small amounts of materials or cover whole village/town in their path.

5. Q: When should you leave the building in case of an earthquake?
   A: 1. only after the ground stops shaking, 2. leave immediately when you feel the ground shaking, 3. you shouldn't leave the building
   Explanation: Stay inside until the shaking stops and it is safe to go outside. Do not exit a building during the shaking.

6. Q: What do you think it's the safest place during an earthquake in your home?
   A: 1. in the garden under a tree, 2. near a window, 3. room where you can hide under a study furniture
Explanation: The safest place is an interior room of your house without any windows, such as a bathroom or closet. If possible, take cover under something sturdy, like a heavy table.

7. Q: What should you do if you are outside during an earthquake?
   A: 1. drop to the ground and cover your head in a safe place 2. go under a tree 3. stand next to a building

Explanation: If you’re outside, the safest place in an earthquake is a clear spot away from buildings, trees, streetlights and power lines. Drop to the ground and stay there until the shaking stops.

8. Q: What should you do if you and your family are in a vehicle during an earthquake?
   A: 1. drive faster 2. pull over and stay in the car 3. get out of the car and run away

Explanation: The adult driving the car needs to pull over to a clear location, stop and stay there with the seatbelt fastened until the earthquake finishes.

9. Q: What causes an earthquake?
   A: 1. movements under Earth's surface 2. bad weather 3. scientists aren't sure what causes them

Explanation: During an earthquake the rocks (tectonic plates) under the Earth's surface move and make the earth shake. This can happen with no warning and occur anywhere in the world over large regions. Earthquakes occur suddenly and unpredictably this is why it's important to be prepared.

10. Q: What scale is used to measure earthquakes?

Explanation: Richter scale was invented to measure the magnitude, meaning the strength, of an earthquake. It is not a physical tool but a measuring system. The physical tool used to measure earthquakes is called a seismograph.

11. Q: Do you know what a seismograph is?
    A: The seismograph is an instrument used to measure earthquakes. They make zig-zag lines that show an earthquake's seismic waves, or vibrations. Scientist who study earthquakes are called seismologists.

12. Q: Do all earthquakes cause tsunamis?
    A: Yes/No

Explanation: The tsunami waves on coast depends on several factors, such as the distance and direction from the earthquake epicentre, the depth and shape of the sea floor, and shape of the coastline.

13. Q: What can you do if your house/town is located near the coast and earthquake happens?
    A: 1. Remain nearby the coast 2. Move away to a space with higher altitude 3. Call the police

Explanation: Move away from the sea and head to areas with higher altitude. A small tsunami can turn into a large tsunami, miles away.

14. Q: What should you do if you are at the beach during an earthquake?
    A: 1. Stay away from the coast 2. Continue your bath 3. Stay under the trees

Explanation: Stay away from the coast. The tsunami does not consist of a single wave but of a series of waves so return only after being informed by the authorities that there is no danger.
**Challenges – select a tool – for children of age 8-10**

You may decide to make the game more complex and use not only question cards, but challenge cards as well. Put as many as you think is adequate to your group of children and play the game as before. When they step on a challenge, turn up one challenge card with the instructions. The tools may be distributed to the groups and in case the tool is not with their group, they can exchange and negotiate! In case they do not need tools to respond, they should either act out a challenge or find objects in their surrounding that are the right answer.

a. Vicky's and Nick's family have an emergency kit prepared in their home that have all the necessary supplies they might need in case of an emergency. List 4 things that they should put in their kit.
   a. Water bottle, flashlight, medical kit, backpack

Explanation: It is always good to have an emergency kit prepared. In case of an earthquake for instance, there could be a power cut or no available clean drinking water. Families can be stuck in their homes for days or asked to go to a shelter. The kit should include: spare clothes such as raincoats and waterproof boots, warm blanket, drinking water, non-perishable food like canned food, flashlight, spare batteries, medical kit.

b. Vicky and Nick are learning about earthquake preparedness from their teacher. Act out in your classroom how to Drop, Cover, and Hold On under your school desk.

Explanation: In case of an earthquake if you are inside you need to DROP to the ground on our hands and knees so you won't fall down from all the shaking. You need to choose a safe place away from anything that could fall down and hurt you. Don't forget to move away from windows as those might break. After you found a safe place, find cover. If you can, get under a sturdy piece of furniture like a desk or table. COVER your head and neck with one hand, and HOLD ON to whatever is covering you. If you aren't under anything, hold onto your head and neck with both arms and hands.

c. Vicky is at home when suddenly an earthquake happens and she is noticing that there are some cracks in the wall. Because it is risky to evacuate the house, call the rescue team for help!
   c. Phone with 112

Explanation: After an earthquake ends, you can safely leave your place. However, there are cases when the flat or the building you are living has some damages or even you notice that there are people or neighbors in need. Call immediately the rescue team at 112.

d. Nick is in school when suddenly he hears a rumbling noise and the ground starts shaking. Identify potential hazards in your classroom that could cause an injury during an earthquake.

Explanation: Potential hazards include objects that might fall, break, or catch fire during an earthquake. For example: bookshelf, objects falling from walls or shelves, furniture, cabinets windows, broken glass.

e. Vicky and Nick learned that most earthquakes are dangerous due to the damages it can cause to their surroundings. List 3 types of damage that an earthquake can cause!
Explaination: Falling glass from broken windows, overturned bookcase, falling objects from shelves and walls, flooding from broken water pipes, fires from broken gas lines, flying debris, collapsing walls, damage to roads and bridges, landslides, tsunami (in coastal areas).

f. During the night, Nick is sleeping when he feels the floor shaking. Name one object which will be very useful for your safety during the night.

f. flashlight

Explaination: Even though a flashlight is not an object that comes immediately to your mind, it is useful especially during the night, because earthquake could cause electricity cuts or damages in the building. So, you can safely find your parents and your way to the exit.

g. Vicky and Nick are learning that after the end of an earthquake, they need to safely evacuate the classroom and follow certain rules. Act on what to do and how to organise an evacuation

g. exit sign

Explaination: The schools have exit sign in case of an emergency. After an earthquake, you can follow the exit signs to exit the building and go to an open space waiting for further instructions.

h. Vicky and Nick have evacuated safely their home when they realised that the next building has extensive damages and it was ready to collapse. Because it’s dangerous, stay away from this building

Explaination: Ask what they should do? Answer: If you are outside during an earthquake move away from anything that can fall or collapse on you such as trees or building. Then, drop to the ground and hold onto your head and neck with both arms and hands.

i. As the earthquake is starting, Vicky and Nick know they need to leave the building after it is done. What should they avoid using when they are leaving the building?

Explaination: Elevators! Because of the aftershocks or electricity going off, they should take the stairs or special exits for people in wheelchair if they exist or ask and adult about the route.

j. Vicky and Nicky know that a whistle can save your life during an earthquake. Name two cases when a whistle can save your life.

Explaination: If you are blocked in a house, give a sign to the rescue team of your location by using your whistle. In many cases, rescue teams use trained dogs which are capable to catch these sounds.

k. Vicky has learned at school that a sufficient number of water bottles are needed during an emergency. List two reasons why water is so important.

Explaination: The city's water supply network is quite fragile and vulnerable to earthquakes. Maybe the earthquake area can face water shortages for a couple of hours. Keep a few bottles of water in your backpack. Also, remember that you might need to sleep outdoor for a while. Water can hydrate you for at least 36 hours.

l. After the earthquake, Nicky's family is ready to leave the house, but they know that they might spend a night in an external open area or a tent, until the rescue team and local authorities allow them to return back to their home. List a tool that can help them spend a night and sleep well.

Explaination: After an earthquake ends, take with you a sleeping bag in case you and your family need to spend a night away from home.
2.4. Flood game scenario

2.4.1. Flood game background story

Vicky and Nick live in a town next to a river. It is a beautiful spring Wednesday after a week of continuous raining and finally, the sun is shining. But Nick got cold some days ago when he got wet in the rain on his way home from the school. So, he has to stay at home. While his parents are working, his grandmother looks after him. Vicky is in the school and takes notes for Nick, as every day, she calls Nick on the phone and explains him the lectures of the day and the homework tasks.

Just after Nick finished his breakfast, their phone rang. It was his mother who talked to his grandmother. The grandmother seemed a bit worried during the call, but Nick saw that she was still trying to act calm towards him. She explained to him that due to the rain of last week, a huge amount of water flowed from the mountain springs to the river going through the city and it is expected to spill and flood parts of the city. The authorities already blocked the traffic, so his parents cannot come home from work very fast. Their house is very close to the river. Nick’s grandmother took a big backpack from the wardrobe and told Nick they need to prepare for evacuation and make a survivor package with necessary things in his backpack, close all doors and windows, shut down the lights and the gas, and wait for the rescue team to evacuate them, as his mom said they will be in their house in half an hour.

In the meantime, Vicky also sent a message to Nick: same thing happened in school - the math class was interrupted by the director who asked their teacher to prepare the kids for evacuation. The students should pack their backpacks, line up and go to the nearby evacuation centre with their teacher. The director also told them, that while they are going to the evacuation centre, the city’s fire fighters, disaster forces and volunteers started to build up a dam from sandbags along the floodplain next to the river. If they manage to build it up before the river water fills up the floodplain, the town will be saved from the flood.

Phrases to learn: flood, dam, sandbags, evacuation, survival package

2.4.2. Game instructions for teachers/educators/parents

The scope is to teach the children about disaster management, acquire the basic knowledge and skills. They will play together, forming a team and fight together against the fire.

If we are playing the game with children aged 5-7, it is advisable to choose the simple version, playing only the simple questions as indicated for that age range and later add more complex questions and challenges.

For older children (in the case of children aged 8-10 or older) we have the opportunity to expand and complicate the basic game with additional questions and challenges.

The game can be played by 3-5 children or 3-5 groups of children. When you play the game with groups of children, use the questions and/or challenges as well, so all kids can feel involved into the game. The groups may receive a challenge or question together.
The basic game instructions are the following:

7. Put the game board together by the numbers. The children can colour it more and make it look like their own village/city. Place the small moving cards upside down. The 4 players (volunteers, school kids, Nick and grandma, flood) should be placed at the corresponding starting point to start the game.

8. If the group is large, divide them in teams of two or more, depending on the size of the group.

9. The first player starts and turns a small moving card over which will show the moving steps and what needs to be moved (which player and how many steps). Move the corresponding character. Then put the small card aside.

10. When a player steps on a question or challenge card, turn up a card from the relevant package of cards and answer the question/challenge.

11. When a player arrives to the destination, the next flood card turned up will mean that steps should be taken backwards for the earthquake character, not forward. This is the reward for the teams for completing the path.

12. If the flood completes the path before all other would arrive to their destination, all players lose the game. All three other characters (volunteers, school kids, Nick and grandma) must arrive to the destination before the earthquake arrives, to avoid the disaster and win the game.

![Figure 3: Flood board](image-url)
Questions – for children 5-7 age group and as a start/addition for age 8-10

Prepare the cards with questions. Put the question (small) cards (select as many as you feel adequate to your group of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up a question card with the instructions – ask the children to reply, then read the explanation.

question (small) cards

1. Q: Should you go in the flooded water?
   A: Yes/No

Explanation: Even if the flood is not very big, it can always become bigger, so the safest way is to go away from the flooded area and not play with the water.

2. Q: Should you hesitate to leave your home when the rescue team arrives to your home?
   A: Yes/No

Explanation: If the rescue team (police, firefighters, military) is telling you to leave the house, you should always do it. They know the situation with the flood the best and you should follow them.

3. Q: Should children leave the school without the teacher?
   A: Yes/No

Explanation: Always listen to the teacher in these situations, as they will know where you should go, is it a shelter or another safe space.

4. Should you listen to unchecked news and spread panic?
   A: Yes/No

Explanation: Make sure you listen to adults - teachers, parents, police. Do not scare your friends, but calmly follow the instructions adults give you.

5. Should you leave your home alone in case of an evacuation?
   A: Yes/No

Explanation: Do not get scared and run on your own, follow the adult you live with or someone from the rescue team (police, firefighter, military) if you are alone in the house. Listen to their instructions.

6. Should you think about a medical kit when preparing the survivor package?
   A: Yes/No

Explanation: If the adults tell you that you have the time to take several things from the house, take the things that are useful, especially medical kit or medicines and band aids in case you or someone else needs them.

Questions – for children aged 8-10

Prepare the cards with questions. Put the question (small) cards (select as many as you feel adequate to your group of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up a question card with the instructions – ask the children to reply, then read the explanation.

question (small) cards

1. Q: How should you dress up when going to the evacuation centre?
   A: 1. Take the biggest winter coat you have 2. Dress up in several layers, comfortably

Explanation: Evacuation centre may be hot or cold and you can take off or put on clothes as necessary. Also, if some water reaches a layer of your clothes, it would be good to have another layer when you take the wet layer of.
2. Q: What is NOT a must to pack into the survivor package?

Explanation: Even of they are really important to you, pack your toys only if there is space for them. In these situations, it is more important to have something to wear and a blanket to sleep with than to take your toys.

3. Q: For how many days should you plan durable food in the survival package?
A: 1. for a week 2. for 2-3 days

Explanation: Try to choose the most durable foods that cannot go bad easily and can be for a longer period of time, but make sure to not only bring food, but also water, blankets and warm clothes, so leave enough space in your backpack for all these elements, don’t pack just food.

4. Q: What should you NOT leave at home when being evacuated?
A: 1. cash and valuables 2. your math book

Explanation: In case there is time, try to take the valuable things, like money and smaller valuables with you. In case the water reaches the house, you want to keep the most important things with you and not have them destroyed with water.

5. Q: How should you carry your backpack or survivor package?
A: 1. in your hand 2. on your shoulder/back to leave the hands free

Explanation: Try to have a backpack instead of a suitcase for example, because even if it can fit less things, it is more practical in the situation where you maybe have to climb in a boat, truck or something else and do not have a lot of space to put your things.

6. Q: What should you do after you arrived to the evacuation centre?
A: 1. Start to cry 2. Wait for further instructions from the evacuation team 3. Try to help the evacuation team's work.

Explanation: Try not to be scared, the evacuation team are professionals who know what to do in these situations. Listen to their instructions carefully and follow what they say.

7. Q: Who should you listen to, when you are in the evacuation centre?

Explanation: Even though you trust and love your friends, the evacuation team are professionals who are especially trained in these situations. Sometimes it happens that people get scared and make the wrong decisions because of that. Professionals are calm and they learned what needs to be done, so make sure to always follow their lead.

8. Q: You still have some place in your backpack. What should you pack?
A: 1. sleeping bag 2. your biggest teddy bear

Explanation: In case you are in an evacuation centre for a bit, you might need a sleeping bag and it will be more useful for you than a toy. It’s more important to be warm and not get a cold, and toys can be there when you come back and the flood is over!

Challenges – select a tool – for children of age 8-10

You may decide to make the game more complex and use not only question cards, but challenge cards as well. Put as many as you think is adequate to your group of children and play the game as before. When they step on a challenge, turn up one challenge card with the instructions. The tools may be distributed to the groups and in case the tool is not with their group, they can exchange and negotiate! In case they do not need tools
This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 833496

a. What is the first thing you should start to prepare when informed about evacuation?

Explanation: Survival package. Teams can choose the 3 most necessary things from the stack of tools they have to build their own survival package and explain.

b. What is a necessary tool you can use to be found by the rescue forces?

b. whistle

Explanation: In case you are cut off and rescuers cannot see you, it would be good to have a whistle because it is louder than your voice.

c. What should you write on your backpack or survival package?

Explanation: Name and address. In case you lose your things in a rush, it would be good to have your name and address, so that someone can return your things if they find them.

d. How should you find the evacuation centre?

Explanation: With instructions from the rescue team, teacher, adult or official announcement on national TV or radio news, you first need to know where evacuation centre is and with their instructions also how to get to it: on foot, with a rescue unit car or something else.

e. What should you close/turn off at home before being evacuated? Tell at least two things!

Explanation: Gas, electricity, stove, other electrical appliances, windows, doors.

f. With whom should you leave the house in case of an evacuation?

Explanation: Adult family member, teacher, evacuation team member (police, military, firefighter)

g. Can you pack your favourite toy in the survivor package?

Explanation: Only if it does not take away the place from more necessary things! Remember, important things first and if adults tell you there is still place for your toys, then you can take them with you.

h. Why should you move in groups towards the evacuation centre?

Explanation: To be able to help each other. It is always better if you are in a group, because your friend or neighbour can have something in his backpack that you may forgot to bring or know directions to the evacuation centre better. Remember to also always help someone in need: if someone is in a wheelchair or needs assistance, you can be their hero!

i. What should be in a survivor package? Tell at least three things!

Explanation: Identity documents, valuables, cash, bank card; durable food for 2-3 days; 1 litre drinking water or tea; seasonal footwear, outerwear, underwear; hygienic appliances (soap, toothbrush); regularly used medicines, medical aids; blanket, sleeping bag or mattress; portable radio or phone; whistle.
2.5. Pandemic game scenario

2.5.1. Pandemic game background story

Nick and Vicky’s school friend Marc came one day and said that his uncle has a very bad cough and a high fever. Vicky knew right away that Marc should let the teacher know. She knew from her parents that there is a dangerous pandemic going on and everyone needs to be more careful. Marc immediately went home and talked to his doctor who advised him to stay at home if he feels sick. In the coming days, all families listened to the news to get the most up to date information about the pandemic. Every family was advised to stay home and get vaccinated when it becomes available to stop the virus spreading.

In the game, try to answer the questions and challenges. What should Nick and Vicky do to not let the virus get to their school? Hurry up and give the right answers – the virus is quick!

To fight the virus, you also need to get the families to get vaccinated as well as help the doctors to get to the hospital.

**Phrases to learn:** virus, pandemic, vaccine, keeping distance, germs

2.5.2. Game instructions for teachers/educators/parents

The scope is to teach the children about disaster management, acquire the basic knowledge and skills. They will play together, forming a team and fight together against the fire.

If we are playing the game with children aged 5-7, it is advisable to choose the simple version, playing only the "Pair the cards challenge" as indicated their age and later add questions and challenges.

For older children (in the case of children aged 8-10 or older) we have the opportunity to expand and complicate the basic game with additional questions and challenges.

The game can be played by 3-5 children or 3-5 groups of children. When you play the game with groups of children, use the questions and/or challenges as well, so all kids can feel involved into the game. The groups may receive a challenge or question together.

**The basic game instructions are the following:**

1. Put the game board together by the numbers. The children can colour it more and make it look like their own village/city. Place the small moving cards upside down. The 4 players (doctors, firefighter, earthquake, kids) should be placed at the corresponding starting point to start the game.
2. If the group is large, divide them in teams of two or more, depending on the size of the group.
3. The first player starts and turns a small moving card over which will show the moving steps and what needs to be moved (which player and how many steps). Move the corresponding character. Then put the small card aside.
4. When a player steps on a question or challenge card, turn up a card from the relevant package of cards and answer the question/challenge.
5. When a player arrives to the destination, the next earthquake card turned up will mean that steps should be taken backwards for the earthquake character, not forward. This is the reward for the teams for completing the path.
6. If the earthquake completes the path before all other would arrive to their destination, all players lose the game. All three other characters (doctors, firefighters, kids) must arrive to the destination before the earthquake arrives, to avoid the disaster and win the game.

Figure 4: Pandemic board
Pair the cards challenge – for smaller children (5-7 age group and as a start/addition for age 8-10)

Prepare the pair cards and shuffle them. Each group of kids will get a number of cards that will be showing various images that need to be connected. Put some challenge (small) cards (select as many as you feel adequate to the level of knowledge of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up/select a pair card – ask the children to connect it with the proper image. After they do, read the explanation below.

Challenge (small card)

1. Face – Mask
Explanation: During the pandemic, you should have a mask over your face every time you are among other people or in closed spaces. Masks prevent virus from reaching other people and you are keeping your friends safe!

2. Hands – Soap
Explanation: Make sure to wash your hands first any time you enter the house or school! Wash your hands carefully before you touch your face or your food.

3. Hands shaking (cross for wrong) - Fist bump (correct sign)
Explanation: Even though it’s nice to say hi to your friends by shaking their hand, in this situation of the pandemic, it is better to just fist bump them as the virus travels fast and can be on the hands of any of us!

4. Kid rubbing nose with hand (cross for wrong) - blowing nose in a handkerchief (correct sign)
Explanation: If your nose is itchy, even when there is no dangerous virus going around, you should always use a handkerchief and not touch it with your hands. We play with our hands and touch many things during the day that are not always clean, and our nose is sensitive, so we should always use a paper or linen handkerchief.

5. Kids hugging (cross for wrong) - Kids cheerfully waving (correct sign)
Explanation: If you haven’t seen your friends or family for a long time, you may want to run and hug them, but remember, the virus travels fast if we are close to each other. In this period, it would be better to just wave to them and say hi.

6. Mask below the nose (cross for wrong) - Mask across mouth and nose (correct sign)
Explanation: We breathe through both our mouths and nose and virus travels through our breath. This is why it is important to cover both your mouth and nose with the mask when there is a pandemic.

7. Mask on a chin (cross for wrong) - Mask across mouth and nose (correct sign)
Explanation: Mask is made to be worn on top of your mouth and nose so that the virus can’t reach other people. If you wear it below the chin, it’s the same as if you don’t have it.

8. Kid rubbing eyes with hands (cross for wrong) - Kid washing face (correct sign)
Explanation: Our eyes are very sensitive even in regular circumstances and you should never touch them with your hands as they can be dirty. If your eyes are itchy, try going to the bathroom, washing your hands and then washing your face with warm water. This is the safest way to touch our eyes and make them less itchy.

9. Kids playing cards in a tight circle (cross for wrong) - Kids playing volleyball in a wide circle (correct sign)
Explanation: While there is a virus around, we should try to play games that do not keep us so close together. So maybe instead of a game of cards, go out and play volleyball in the nature.

10. Kid coughing in the hand (cross for wrong) - Kid coughing in the elbow (correct sign)
Explanation: Always cover your mouth when you cough, but the best way would be to cough in your elbow, as this keeps germs off your hands so you won't spread them to other people and make them sick.

11. Hands - Hand sanitizer
Explanation: If you can’t wash your hands with water and soap, always use the hand sanitizer. Hand sanitizer keeps your hands free of germs that can make you or other people sick.

12. Kid eating a sandwich with hands (cross for wrong) - Mask across mouth and nose (correct sign)
Explanation: If you are in public among people during the pandemic, you should have your mask over your mouth and nose and not take them off to eat. Eat when you come home and you have washed your hands in detail, so you can touch your food without worrying about germs.

13. 2 people 1.5 m apart (correct sign) - kids standing close (cross for wrong)
Explanation: Try to talk to your friends on a safe distance, around 1.5 meters apart. This way you can still communicate and spend time together, but virus will not be able to travel through your breath from one to the other.

Questions – for children of age 8-10
Prepare the cards with questions. Put the question (small) cards (select as many as you feel adequate to your group of children) to the different paths – any place you select should be fine. Children will randomly step on it. When they step on it, turn up a question card with the instructions – ask the children to reply, then read the explanation.

question (small) cards

1. Q: Since Nick and Vicky know there is a virus around, how should they say hi to their friends in school?

Explanation: When there is a virus around, the best way to say hi to your friends in school would be to wave to them from a safe distance. You could also fist bump them, but the safest way is to stay apart so that the virus cannot travel through your breath or touch among you.

2. Q: What is the first thing Nick is supposed to do when he comes back to school from a break in a school yard?
   A: 1. Go to the classroom 2. Wash his hands 3. Have his lunch

Explanation: Remember, Nick played in the playground and touched many things outside that can be very dirty. If he eats his lunch before washing his hands, these germs from outside can be in his body through food. Also, if he goes to the classroom, he can maybe touch his face, mouth or nose with his hands and again get these germs into his body. The best option for Nick is to always wash his hands after playing outside, if there is a pandemic or not.

3. Q: Vicky’s eyes are itchy and she is in class. What should she do?
   A: 1. Use her hands to scratch them 2. Use a clean handkerchief to wipe them 3. Ask the teacher to go to the restroom, wash her hands and eyes
4. Q: Nick feels like he will sneeze. What is the proper way to do it?
   A: 1. Sneeze in his hand 2. **Move from the others and sneeze in his elbow**

Explanation: It is very important to move away from other people if you can while sneezing. Germs and viruses travel through our breath and the safest way not to get someone sick is to move away and sneeze in our elbow, so that we do not get those germs and viruses on our hands either. Nick should do the same.

5. Q: Vicky is entering a store, but she was on the bus and she has nowhere to wash her hands. What should she search at the entrance?
   A: Hand sanitizer.

Explanation: If Vicky is unable to was her hands immediately when getting out of the bus, she should use a hand sanitizer, that also kills germs and viruses on her hands that she maybe touched on the bus that is not always very clean.

6. Q: Nick is playing outside and he suddenly really wants to eat chips. Should he do it?
   A: Yes/No

Explanation: Not while outside. Nick should go back home, wash his hands and touch food, especially if this food is being eaten with hands, like chips. If he is really hungry and needs to eat outside, he should use the hand sanitizer first.

7. Q: School decided that classes are online and Vicky and Nick miss their friends. Should they invite them over to play video games?
   A: Yes/No

Explanation: If school is online, this means that Vicky and Nick shouldn’t be physically close in a closed space with their friends. Maybe they can invite their friends to play video games online together or to spend time outside throwing ball and not being very close to each other. This way, they protect both themselves and their friends and family.

8. Q: Vicky is on the bus, wearing a mask, but she feels like she will cough. What is the right way to do it?
   A: 1. Remove the mask to cough in her hand 2. **Keep the mask on and cough in her elbow with the mask still over mouth and nose**

Explanation: Even though it may seem better to remove the mask, it is there exactly for that reason: to stop germs and viruses from her cough or sneeze get to other people on the bus. Also, she will not get them on her hands if she coughs in her elbow.

**Challenges – select a tool – for children of age 8-10**

You may decide to make the game more complex and use not only question cards, but challenge cards as well. Put as many as you think is adequate to your group of children and play the game as before. When they step on a challenge, turn up one challenge card with the instructions. The tools may be distributed to the groups and in case the tool is not with their group, they can exchange and negotiate! In case they do not need tools to respond, they should either act out a challenge or find objects in their surrounding that are the right answer.
a. Once Marc has told the teacher about his uncle maybe having a virus, what should Vicky and Nick do?
   Explanation: Tell their parents and start taking measures to protect themselves and their friends and family.

b. Vicky sees Nick wearing a mask in a classroom on his chin. What should she do?
   Explanation: Tell him to put the mask over his mouth and nose.

c. What should Nick and Vicky do as soon as they come home from school?
   Explanation: Wash hands, change their clothes, leave their shoes in the hallway.

d. Nick remembers hearing a doctor on TV talking about the dangerous virus. What are at least 2 things that he should remember?
   Explanation: Mask on the face, 2m distance, wash hands properly

e. Vicky starts having a runny nose. What should she do?
   Explanation: Not touch her face and use handkerchief. Tell her parents immediately.

f. Think of the games you can play while remaining 2 meters away from each other.
   Explanation: Hide and seek, pantomime, racing
References


Center on the Developing Child. Executive Function Activities for 5- to 7-year-olds. *Harvard University*

Center on the Developing Child. Executive Function Activities for 7- to 12-year-olds. *Harvard University*

Health Link British Columbia. (2020). Growth and Development, Ages 6 to 10 Years

Heldal, I. (2016). Simulation and Serious Games in Emergency Management. *Faculty of Engineering and Business Administration Bergen University College*

Meesters, K. & Walle, van de B. (2013). Disaster in my backyard: a serious game introduction to disaster information management. *Tilburg University*


The Growing Child: School-Age (6 to 12 Years). *Stanford Children’s Health*


Trybus, J. (2015). Game-Based Learning: What it is, Why it Works, and Where it’s Going. *New Media Institute*

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<table>
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<th>Universal moving cards</th>
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<td><img src="image21.png" alt="Diagram of medical items" /></td>
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pair image cards

1. Fire extinguisher
2. Fire
3. Carpet
4. Gas stove
5. Match
6. Man with a briefcase
pair image cards

- Hand holding a phone with the number 112.
- A burning house.
- A towel rack with a towel.
- A faucet with water flowing out.
- A fire alarm in a building.
- A battery with a lightning symbol.
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<thead>
<tr>
<th><strong>Challenges</strong></th>
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<tbody>
<tr>
<td>Vicky remembers that last year there has been a firefighter who came to the schools and thought them about fire safety.</td>
<td>Vicky and her parents were cooking dinner when suddenly a fire starts in the kitchen.</td>
</tr>
<tr>
<td>Choose one tool that the firefighter explained should be used to put out a fire.</td>
<td>Choose the tool that Vicky should put over the kitchen fire to stop it from spreading.</td>
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<td>There is a fire in Nick’s and Vicky’s village. They need to leave their homes and go to a shelter outside their village.</td>
<td>Nick and Vicky are walking home from school and notice that one of their friend’s house is on fire and their friend looks hurt.</td>
</tr>
<tr>
<td>Choose a tool that they should take with themselves to the shelter.</td>
<td>Choose the most useful tool they can help their friend with before a doctor arrives.</td>
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<td>Nick is living in the next village and he sees the forest on fire moving towards Vicky’s village.</td>
<td>Nick is in the school’s gym when he is starting to smell a little bit of smoke and he is staring to cough.</td>
</tr>
<tr>
<td>Choose the tool Nick will have to use to alert the fire department.</td>
<td>Use the best tool you can to cover Nick’s face when he is escaping the building.</td>
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<td>Challenges</td>
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<tr>
<td>Vicky is at her school classroom when she starts to smell smoke and hear an alarm sound. Choose the tool that she is hearing.</td>
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</table>

| Nick and Vicky are at school when suddenly the fire alarm goes off. They have to quickly escape the building and go to the safe meeting area outside. Pair the tool that shows what way they should follow. |

| There is a fire in Nick's house. Nick's escape route is blocked by a door. A firefighter has entered the building to help Nick escape. Choose the most helpful tool that will help the firefighter and Nick remove the barrier in their way. |

| Put it on order what should you do if your clothes catch on fire, and you are unable to quickly take them off? |
| 1. Stop drop and roll on the ground |
| 2. call for help |
| 3. run to find water |

| There is a fire in Vicky's school and one of her friend's clothes catches on fire. Vicky helps by putting and taping a blanket over her friends to put out the fire. Act out running for the blanket and tap the person lying on the floor whose clothes are on fire. |

| What is the key information you need to tell the dispatcher when making an emergency call? |
| Act out making the call with adding: your full address, description of the emergency, tell if there are any people hurt or in danger. |
Take a piece of paper and draw your escape route from your classroom to the outside.

On your drawing you should also indicate where the safe meeting area is.
Challenges
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<th>Questions</th>
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<tbody>
<tr>
<td>Can you list at least 3 ways that can help you to extinguish fire?</td>
<td></td>
</tr>
<tr>
<td>When escaping from smoke what do you do?</td>
<td></td>
</tr>
<tr>
<td>Vicky and Nick safely escaped the burning building but their pet still inside the burning building.</td>
<td></td>
</tr>
<tr>
<td>How to prepare your home for a potential fire? List at least 3 things.</td>
<td></td>
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<tr>
<td>If you are unable to leave the house and you have to stay in a safe room during the fire where should you go to be seen?</td>
<td></td>
</tr>
<tr>
<td>If you are unable to leave the house and have to stay in a safe room during the fire, what could you do to stop the smoke entering the room?</td>
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</tr>
<tr>
<td>Questions</td>
<td>Answer</td>
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<td>--------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
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<tr>
<td>You must only use the emergency number in case of an emergency. What is the emergency number?</td>
<td>What should you do if there is a fire in your home?</td>
</tr>
<tr>
<td>Is crawling under smoke safer than walking through it?</td>
<td>Why is it important not to open a door if the doorknob is hot?</td>
</tr>
<tr>
<td>Vicky and Nick are in the classroom and they see firefighters through the closed windows. What should they do?</td>
<td>There is a fire emergency in the summer, Vicky has short sleeves, but she also has a hoodie in her backpack. What should she do?</td>
</tr>
</tbody>
</table>
Questions
Nick is in the corridor of the building and there is a fire. How should he leave the building?
<table>
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<tr>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky’s and Nick’s family have an emergency kit prepared in their home that have all the necessary supplies they might need in case of an emergency. List 4 things that they should put in their kit.</td>
</tr>
<tr>
<td>Vicky and Nick are learning about earthquake preparedness from their teacher. Act out in your classroom how to Drop, Cover, and Hold On under your school desk.</td>
</tr>
<tr>
<td>Vicky is at home when suddenly an earthquake happens and she is noticing that there are some cracks in the wall. Because it is ricky to leave the house, call the rescue team for help.</td>
</tr>
<tr>
<td>Nick is in schools when suddenly he hears a rumbling noise and the ground started shaking. Identify potential hazards in your classroom that could cause an injury during an earthquake.</td>
</tr>
<tr>
<td>Vicky and Nick learned that most earthquakes are dangerous due to the damages it can cause to their surroundings. List 3 types of damage that an earthquake can cause!</td>
</tr>
<tr>
<td>During the night, Nick is sleeping when he feels the floor shaking. Name one object which will be very useful for your safety during the night.</td>
</tr>
</tbody>
</table>
Challenges
<table>
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<tr>
<th>Challenges</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicky and Nick are learning that after the end of an earthquake, they need to safely evacuate the classroom and follow certain rules. Act on what to do and how to organise an evacuation.</td>
<td>Vicky and Nicky have evacuated safely their home when they realised that the next building has extensive damages and it was ready to collapse. Because its dangerous, stay away from this building.</td>
</tr>
<tr>
<td>As the earthquake is starting, Vicky and Nick know that they need to leave the building. What should they avoid using when they are leaving the building?</td>
<td>Vicky and Nick know that a whistle can save your life during an earthquake. Name two cases when a whistle can save your life.</td>
</tr>
<tr>
<td>Vicky has learned at school that a sufficient number of water bottles are needed during an emergency. List two reasons why water is so important.</td>
<td>After the earthquake, Nick's family is ready to leave the house, but they know that the might spend a night in an external open area or a tent, until the rescue team and local authorities allow them to return back to their home. List a tool that can help them spend a night and sleep well.</td>
</tr>
<tr>
<td>Questions</td>
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<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>How long does an earthquake usually last?</strong></td>
<td></td>
</tr>
<tr>
<td>1. few seconds to several minutes</td>
<td></td>
</tr>
<tr>
<td>2. days</td>
<td></td>
</tr>
<tr>
<td>3. hours</td>
<td></td>
</tr>
<tr>
<td><strong>What's an aftershock?</strong></td>
<td></td>
</tr>
<tr>
<td>1. collapsed buildings</td>
<td></td>
</tr>
<tr>
<td>2. smaller shakes after the earthquake</td>
<td></td>
</tr>
<tr>
<td>3. landslide</td>
<td></td>
</tr>
<tr>
<td><strong>Vicky is in her home and suddenly she feels an earthquake, what should she do?</strong></td>
<td></td>
</tr>
<tr>
<td>1. Run outside the house</td>
<td></td>
</tr>
<tr>
<td>2. Stand by the window</td>
<td></td>
</tr>
<tr>
<td>3. Drop, Cover, and Hold On</td>
<td></td>
</tr>
<tr>
<td><strong>When should you leave the building in case of an earthquake?</strong></td>
<td></td>
</tr>
<tr>
<td>1. only after the ground stops shaking</td>
<td></td>
</tr>
<tr>
<td>2. leave immediately when you feel the ground shaking</td>
<td></td>
</tr>
<tr>
<td>3. you shouldn’t leave the building</td>
<td></td>
</tr>
<tr>
<td><strong>Do you know what are landslides, and why are they dangerous?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>What do you think it’s the safest place during an earthquake in your home?</strong></td>
<td></td>
</tr>
<tr>
<td>1. in the garden under atree</td>
<td></td>
</tr>
<tr>
<td>2. near a window</td>
<td></td>
</tr>
<tr>
<td>3. room where you can hide under a study furniture</td>
<td></td>
</tr>
<tr>
<td>What should you do if you are outside during an earthquake?</td>
<td>What should you do if you and your family are in a vehicle during an earthquake?</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. drop to the ground and cover your head in a safe place</td>
<td>1. drive faster</td>
</tr>
<tr>
<td>2. go under a tree</td>
<td>2. pull over and stay in the car</td>
</tr>
<tr>
<td>3. stand next to a building</td>
<td>3. get out of the car and run away</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What causes an earthquake?</th>
<th>What scale is used to measure earthquakes?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. movements under Earth’s surface</td>
<td>1. Kitchen scale</td>
</tr>
<tr>
<td>2. bad weather</td>
<td>2. The Richter Scale</td>
</tr>
<tr>
<td>3. scientists aren’t sure what causes them</td>
<td>3. Earthquake scale</td>
</tr>
</tbody>
</table>

| Do you know what a seismograph is?                        | Do all earthquakes cause tsunamis?                                              |
What can you do if your house/town is located near the coast and an earthquake happens?

1. Remain nearby the coast
2. Move away to a space with higher altitude
3. Call the police

What should you do if you are at the beach during an earthquake?

1. Stay away from the coast
2. Continue your bath
3. Stay under the trees
<table>
<thead>
<tr>
<th>What is the first thing you should start to prepare when informed about evacuation?</th>
<th>What is a necessary tool you can use to be found by the rescue forces?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What should you write on your backpack or survivor package?</td>
<td>How should you approach the evacuation center?</td>
</tr>
<tr>
<td>What should you close at home before being evacuated? Tell at least two things!</td>
<td>With whom should you leave the house in case of an evacuation?</td>
</tr>
<tr>
<td>Can you pack your favourite toy in the survivor package?</td>
<td>Why should you move in groups towards the evacuation center?</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>What should be in a survivor package?</td>
<td></td>
</tr>
<tr>
<td>Tell at least three things!</td>
<td></td>
</tr>
</tbody>
</table>
Challenges
<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should you go in the flooded water?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Should you hesitate to leave your home when the rescue team arrives to your home?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Should children leave the school without the teacher?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Should you listen to horror news and spread panic?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Should you leave your home alone in case of an evacuation?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Should you think about a medical kit when preparing the survivor package?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Questions</td>
<td></td>
<td>What is NOT a must to pack into the survivor package?</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>How should you dress up when going to the evacuation center?</td>
<td>1. Take the biggest wintercoat you have</td>
<td>1. Your three favourite toys</td>
</tr>
<tr>
<td></td>
<td>2. Dress up in several layers, comfortably.</td>
<td>2. A thin, warm blanket</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Underwear</td>
</tr>
</tbody>
</table>

| For how many days should you plan durable food in the survivor package?  | 1. for a week                                                   |                                                                                   |
|                                                                          | 2. for 2-3 days                                                 |                                                                                   |

| What should you NOT leave at home when being evacuated?                 | 1. cash and valuables                                          |                                                                                   |
|                                                                          | 2. your math book                                               |                                                                                   |

| How should you carry your backpack or survivor package?                 | 1. in your hand                                                 |                                                                                   |
|                                                                          | 2. on your shoulder/back to leave the hand free                  |                                                                                   |

<p>| What should you do after you arrived to the evacuation center?          | 1. Start to cry                                                 |                                                                                   |
|                                                                          | 2. Wait for further instructions from the evacuation team       |                                                                                   |
|                                                                          | 3. Try to help the evacuation team’s work.                      |                                                                                   |</p>
<table>
<thead>
<tr>
<th>Who should you listen to, when you are in the evacuation center?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Your best friend.</td>
</tr>
<tr>
<td>2. The evacuation team.</td>
</tr>
<tr>
<td>3. Your grandmother’s best friend.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>You still have some place in your backpack. What should you pack?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. sleeping bag</td>
</tr>
<tr>
<td>2. your biggest teddy bear</td>
</tr>
<tr>
<td>Tools</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td><img src="image1.png" alt="Whistle" /></td>
</tr>
<tr>
<td><img src="image2.png" alt="Blanket" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Rollup Mat" /></td>
</tr>
<tr>
<td>Challenges</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Once Marc has told the teacher about his uncle maybe having a virus, what should Vicky and Nick do?</td>
</tr>
<tr>
<td>Vicky sees Nick wearing a mask in a classroom on his chin. What should she do?</td>
</tr>
<tr>
<td>What should Nick and Vicky do as soon as they come home from school?</td>
</tr>
<tr>
<td>Nick remembers hearing a doctor on TV talking about the dangerous virus. What are at least 2 things that he should remember?</td>
</tr>
<tr>
<td>Vicky starts having a runny nose. What should she do?</td>
</tr>
<tr>
<td>Think of the games you can play while remaining 2 meters away from each other.</td>
</tr>
</tbody>
</table>
Pair image cards

- Person
- Face mask
- Hands raised
- Soap
- Wrong shaking hands
- Correct elbow bump
Pair image cards

- Incorrect: Touching face
- Correct: Covering mouth
- Incorrect: Hugging
- Correct: Waving
- Incorrect: Not wearing masks
- Correct: Wearing masks
### Questions

**Since Nick and Vicky know there is a virus around, how should they say hi to their friends in school?**

1. Hug  
2. Wave  
3. Fist bump  
4. Shake hands

**What is the first thing Nick is supposed to do when he comes back to school from a break in a school yard?**

1. Go to the classroom  
2. Wash his hands  
3. Have his lunch

**Vicky’s eyes are itchy and she is in class. What should she do?**

1. Use her hands to scratch them  
2. Use a clean handkerchief to wipe them  
3. Ask the teacher to go to the restroom, wash her hands and eyes

**Nick feels like he will sneeze. What is the proper way to do it?**

1. Sneeze in his hand  
2. Move from the others and sneeze in his elbow

**Vicky is entering a store, but she was on the bus and she has nowhere to wash her hands.**

What should she search at the entrance?

**Nick is playing outside and he suddenly really wants to eat chips. Should he do it?**

Yes  
No
School decided that classes are online and Vicky and Nick miss their friends. Should they invite them over to play video games?

Yes
No

Vicky is on the bus, wearing a mask, but she feels like she will cough. What is the right way to do it?

1. Remove the mask to cough in her hand
2. Keep the mask on and cough in her elbow with the mask still over mouth and nose