

Defeat the earthquake

Game instructions

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.

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

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 earthquake.

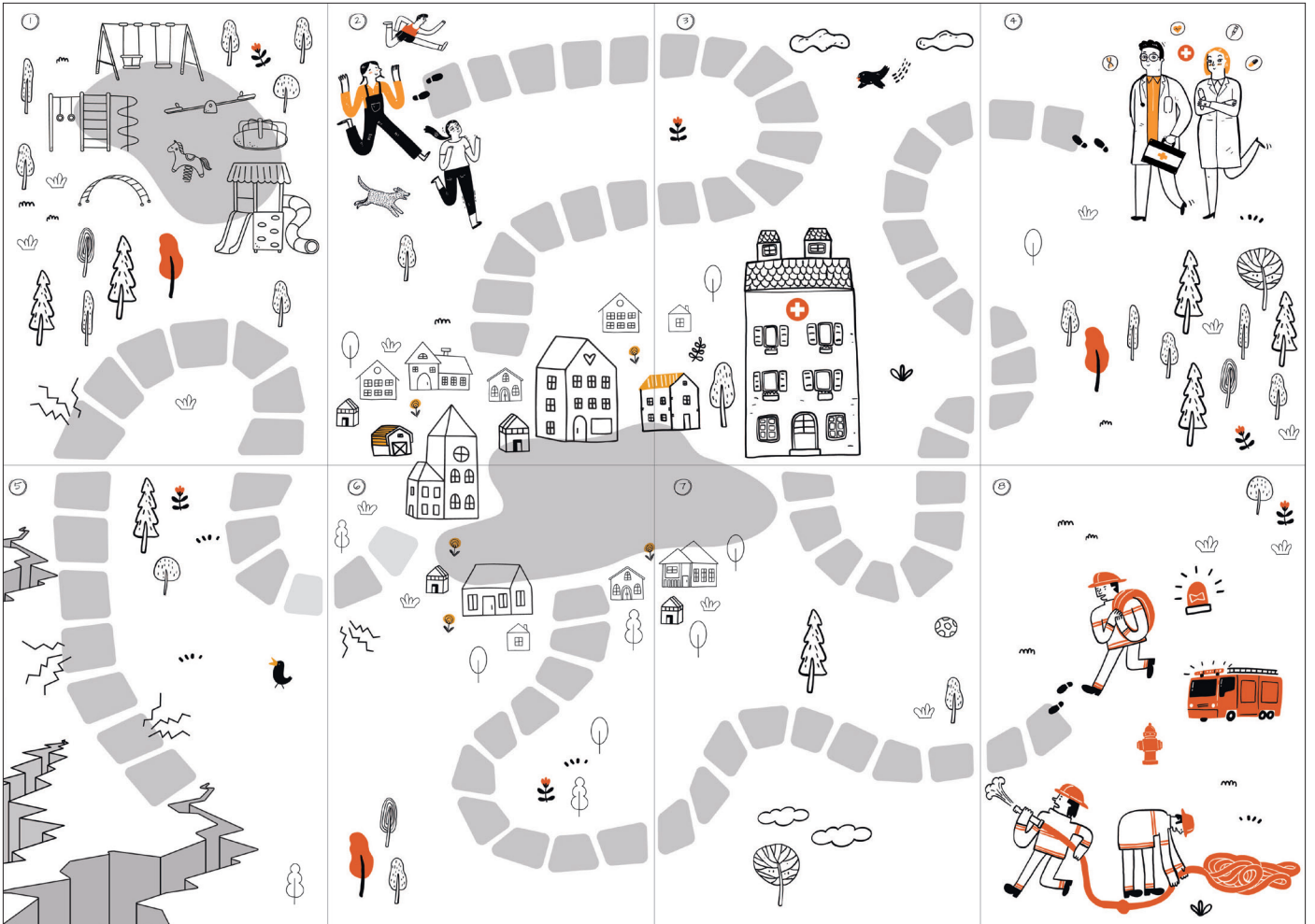
If we are playing the game with children **aged 5-7**, it is advisable to choose the simple version, playing only the "Pair the cards challenge" as indicated their age and later add questions and challenges.

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.



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.



*Challenge
(small card)*

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.



Question
(small) cards

- 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 Kérdés: What causes an earthquake?

Válasz: 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?

A: 1. Kitchen scale 2. **The Richter Scale** 3. Earthquake scale

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.

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!

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!

Explanation: 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.

flashlight

Explanation: 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

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.

- 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

Explanation: 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?

Explanation: 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.

Explanation: 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.

Explanation: 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.

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