



KiVa®  
Antibullying Program



# PULMIKAS

GAME MANUAL



TURUN  
YLIOPISTO  
UNIVERSITY  
OF TURKU

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Pulmikas is a game in which students form teams and resolve various problems that typically emerge at school.

## REQUIRED EQUIPMENT

The game moderator needs a mobile device to start and control the game.

For the shared screen, a computer connected to a projector is needed.

Each player needs their own mobile device.

## ALL DEVICES USED FOR GAMEPLAY MUST HAVE AN INTERNET CONNECTION

The players must have an internet connection in order to participate. Gameplay involves some data transfer (maximum 2 Mb per game), which may incur costs, depending on the player's mobile subscription. The teacher is responsible for making sure that all students are allowed to play games with their mobile phones. The game can also be played using the school's devices.

The recommended browser for the game is Google Chrome. On mobile devices, any browser can be used except Internet Explorer, which is not recommended. On a computer, Internet Explorer is not recommended, either, because it doesn't run all of the game's animations properly. However, the game can be played using Internet Explorer, as well, if it is the only browser available.

## WHICH MOBILE DEVICES CAN BE USED FOR GAMEPLAY?

The game can be played on Android and iOS devices (Samsung, Huawei, iPhone, etc.). The game can't be played on Windows Phone devices (Nokia and Lumia).

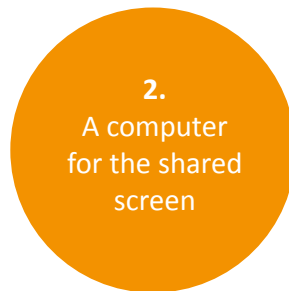
## HOW LONG DOES A GAME LAST?

The game is designed in such a manner that it can be completed within a standard lesson, 45 minutes. However, the exact duration of each game depends on the amount of discussion it evokes among the students.



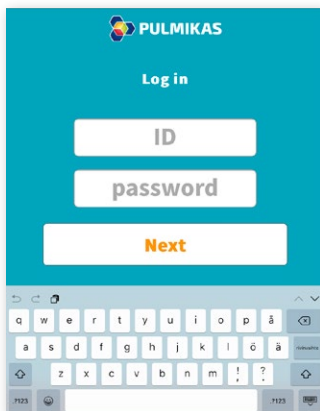
## TEST USE OF THE GAME

We recommend that the teacher first try the game alone or with colleagues before introducing it to students. If you try the game alone, you should have three devices:



\*Use this device to join one team; you can leave the other teams empty.

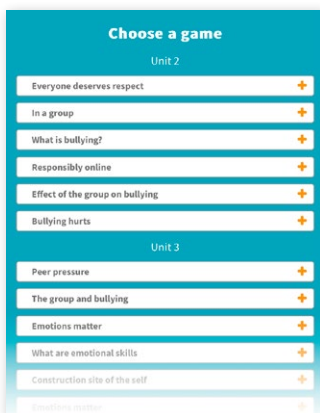
## Starting the game



Moderator's view

### LOG IN USING YOUR MOBILE DEVICE

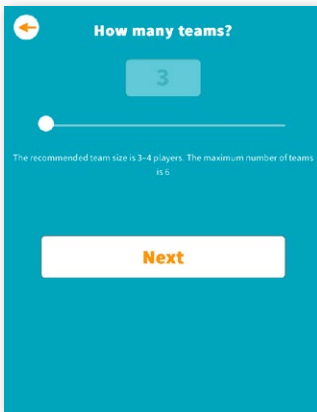
1. On your mobile device, navigate to: **pulmikas.net/en/login**.
2. Enter your ID and password. The ID is the same school ID and the password is your teacher password, which you also use to log into the KiVa program's website. Select Next.



Moderator's view

3. Choose the game version. The games are divided into two categories: Unit 2 and Unit 3. For more information about the available games, click the white boxes (e.g. Mutual respect and communication). Once you have opened the further information, you can choose a game.





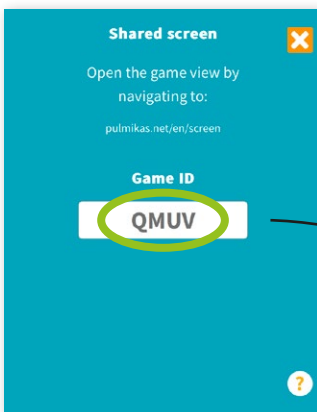
Moderator's view

4. Divide the students into 3–6 teams. The ideal team size is 4 students, but bigger or smaller teams are also possible. **Assign each team a number and let them know which number their team is.** This number will be needed for the players' login. Ask the students to sit in teams so that it is easier for them to have a conversation.

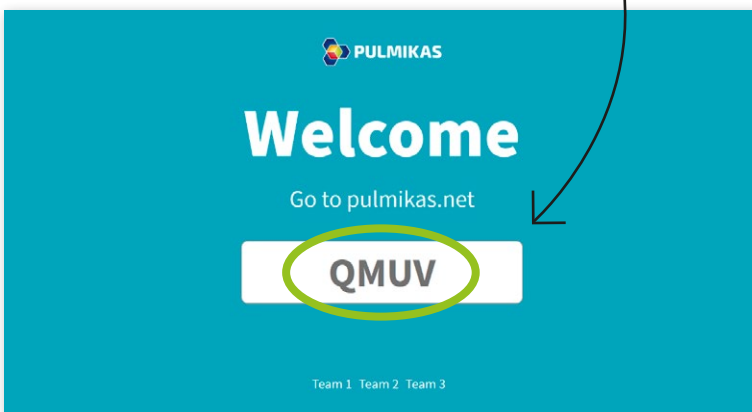
Select the number of teams from your mobile device using the slide control.

## LAUNCH THE SHARED SCREEN

5. Launch the shared screen on a computer by navigating to [pulmikas.net/en/screen](http://pulmikas.net/en/screen). Enter the shared screen code, which you see on your mobile device, to the "Game code" box on the computer. Set the computer in full screen mode (shortcuts: PC = F11, Mac = Control + Command + F).



Moderator's view

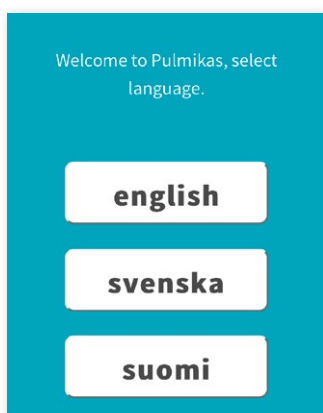


Shared screen

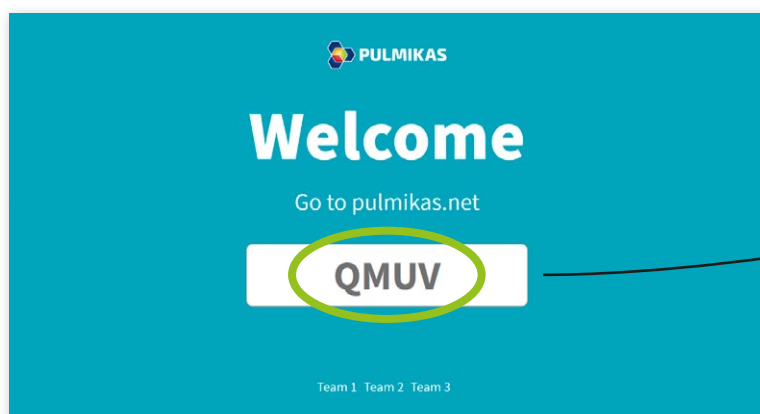


## STUDENTS LOG IN USING THEIR MOBILE DEVICES

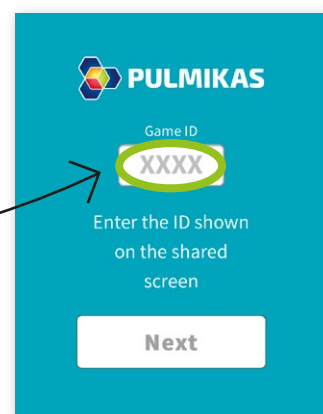
- The students log into the game using their own mobile devices at **pulmikas.net**. They must choose the language first. The game code, which is needed for login, is shown on the shared screen.



*Moderator's view*



*Shared screen*



*Player's view*

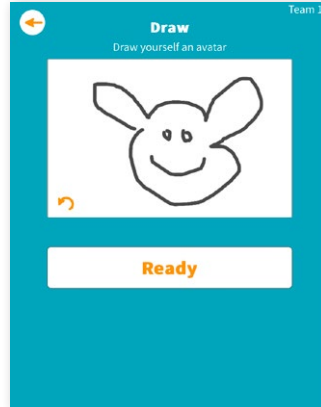


## STUDENTS JOIN TEAMS

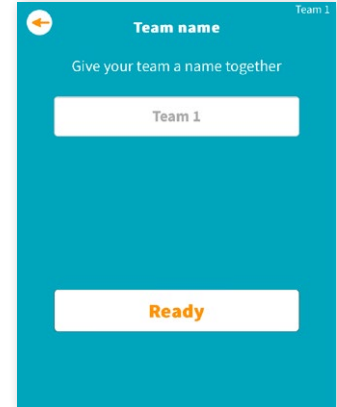
- Students join the team (Team 1, Team 2, Team 3, etc.) to which you assigned them earlier. Remind the students of the number of their team.
- After joining, every player draws an avatar. The team member whose avatar is ready first gets a display in which the team's name is entered. Ask the students to think of a team name together.



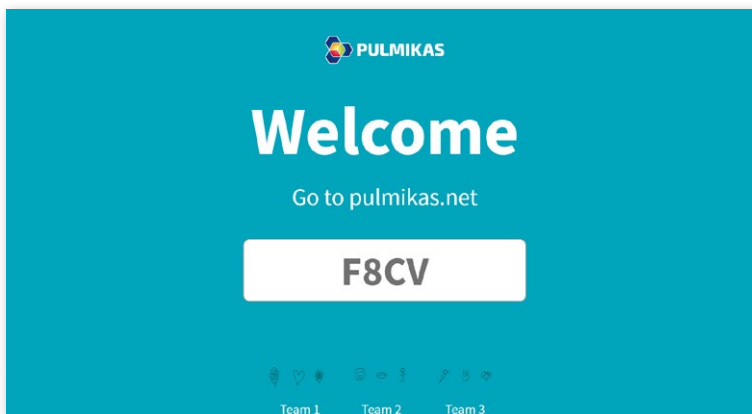
Player's view



Player's view

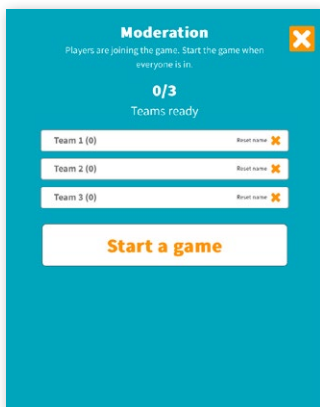


Player's view

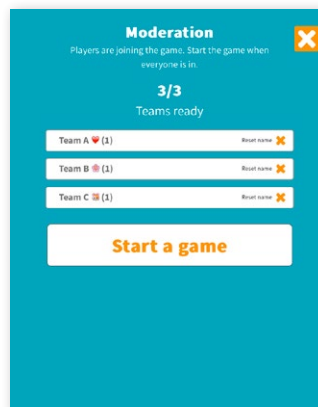


Shared screen

The players' avatars and team names are displayed on the shared screen.



Moderator's view



Moderator's view

In your mobile device, you can see how many players have joined each team. The moderator can delete a team name using the "Reset name" button. After this, the team cannot be renamed; it remains Team 1 (or whichever its number is).

**Before choosing "Start a game", ask everyone to confirm that they have logged in and check from the shared screen that all teams have names.**

- Start the game.





Shared screen

Students can log into the game even after it has started. The game code is always displayed at the top of the shared screen.

## Playing the game and task types

The moderator moves the game forward using their mobile device. **NB! You can only move forward in the game. The “back” command will interrupt the game.**

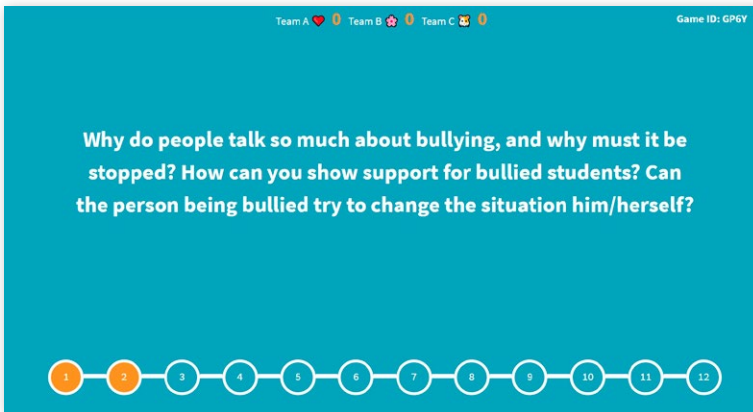


← Use this icon to log out if necessary.

Moderator's view







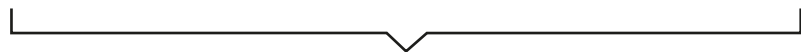
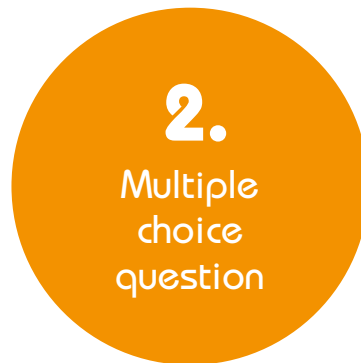
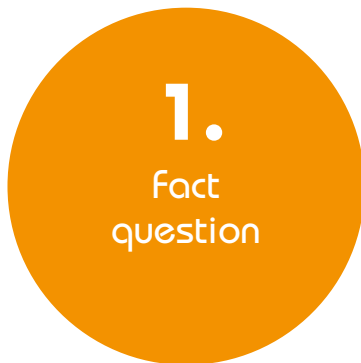
Shared screen

The game starts with a brief introduction. You can read the introduction text out loud. During the game, you will receive prompts telling you what the students are doing at the moment.

You can track the progress of the game from the numbered bullet symbols at the foot of the shared screen. The last bullet marks a summary of the key message of the game; it does not include a task.

**Move forward** using your mobile device. The first task appears on the shared screen.

The game contains three different task types. The order and amount of task types presented vary from game to game.

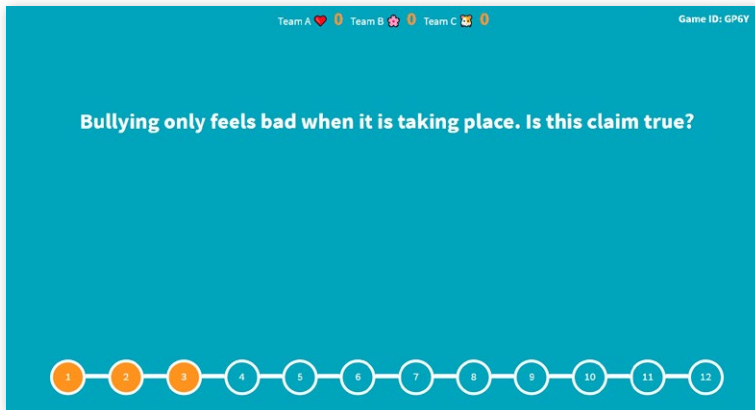


After each multiple choice question and open question, the game randomly chooses one team to provide an **explanation** to a question presented by the game. The explanation is spoken out loud. The moderator decides whether the explanation is good enough to score extra points.

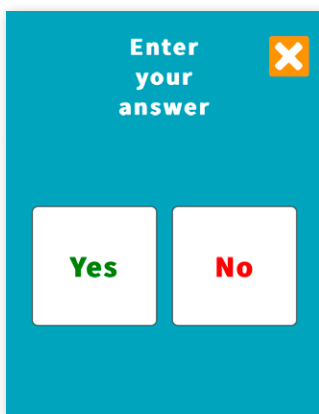


## FACT QUESTION

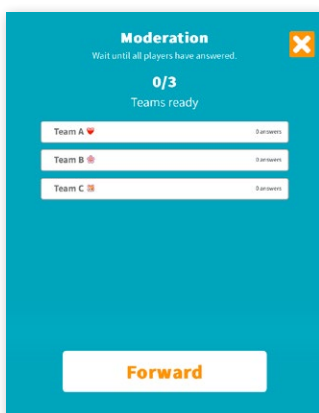
- A short question to which **each player answers individually** using their own mobile device. Every correct answer scores points for the team.
- The answer to a fact question can be a number, percentage, or yes/no.
- When all players have answered the question, the game shows the right answer with an explanation based on relevant research.



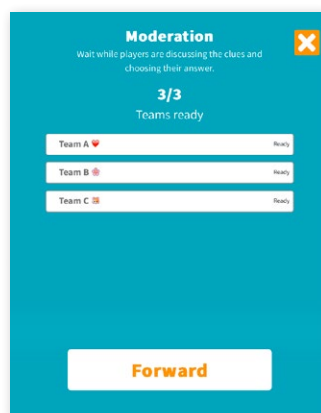
Shared screen



Player's view



Moderator's view

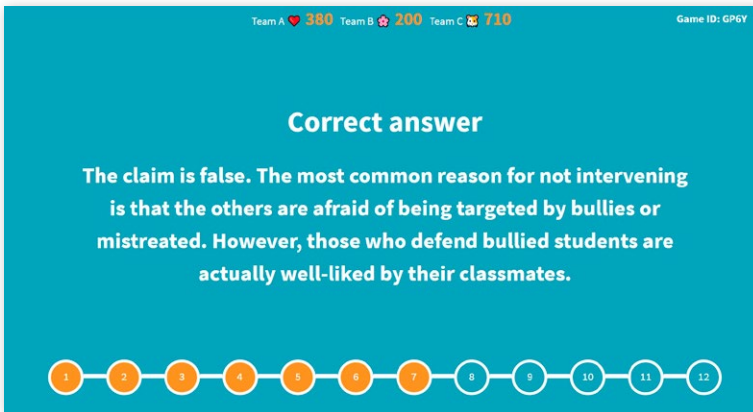


Moderator's view

On your mobile device, you can see how many players from each team have answered the question.

When all players have answered, move **forward** using your mobile device.





Shared screen

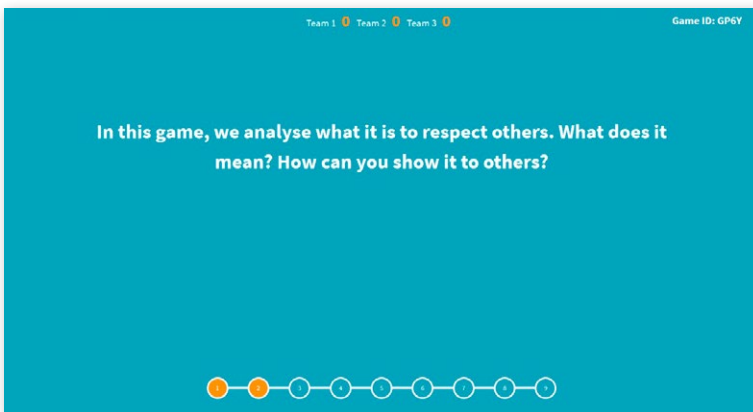
The points are displayed on the shared screen. The maximum score from fact questions is 120 points. The game accounts for the number of players in each team so that even if not all teams have the same number of players, all teams can nevertheless achieve the maximum score.

Once you have checked out the points, **move forward** using your mobile device.



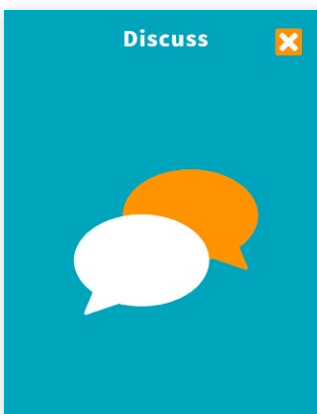
## MULTIPLE CHOICE QUESTION

- Teams must choose the right one from three optional answers. The game offers clues that help resolve the problem. **These questions are answered in teams.**

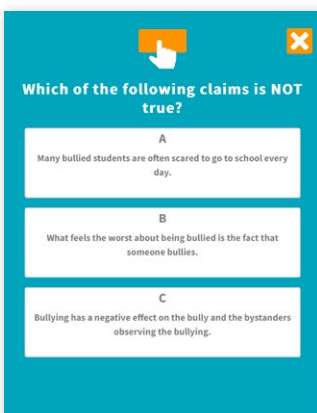


Shared screen

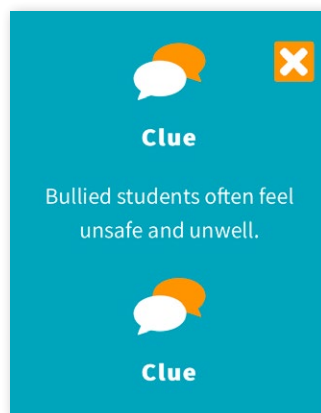
The problem situation is shown on the shared screen. **Instruct the students to discuss the issue featured in the question.** You can read the situation description out loud.



Player's view



Player's view

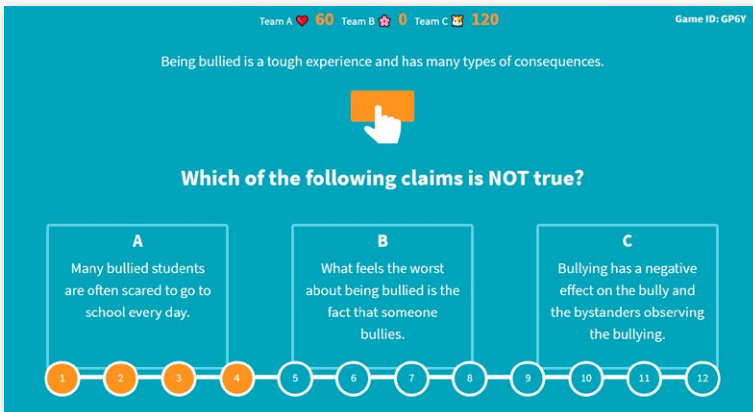


Player's view

Once the students have discussed the issue for a while, move forward using your mobile device. When you have done this, the students will receive clues that help them resolve the problem. One member of each team gets a display where the team enters its answer.

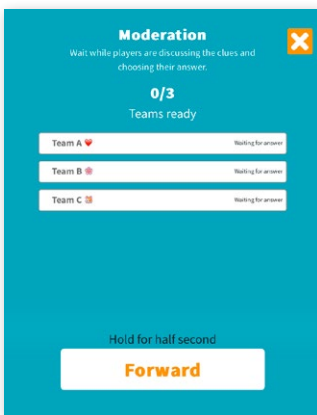
**Instruct the students to discuss the clues together and answer as a team.** One of the given options is chosen.



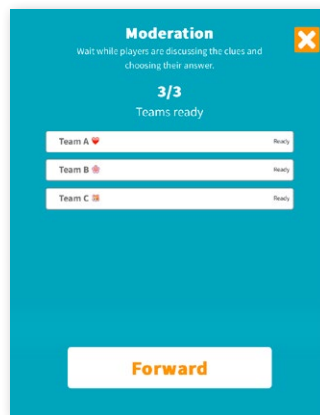


Shared screen

The options are also shown on the shared screen.

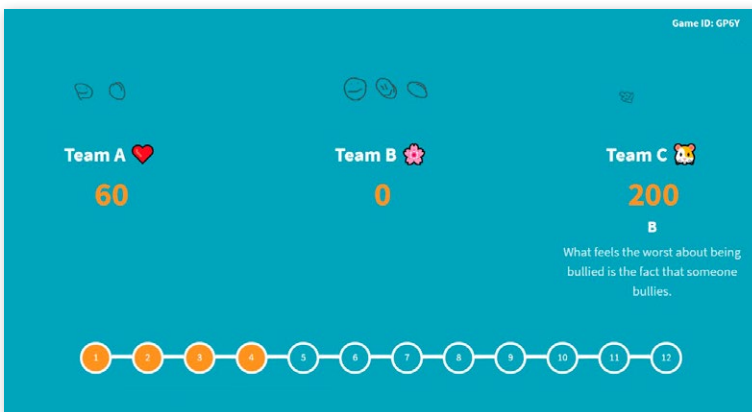


Moderator's view



Moderator's view

You can see on your mobile device when all teams have answered. When all teams have answered, **move forward** using your mobile device.

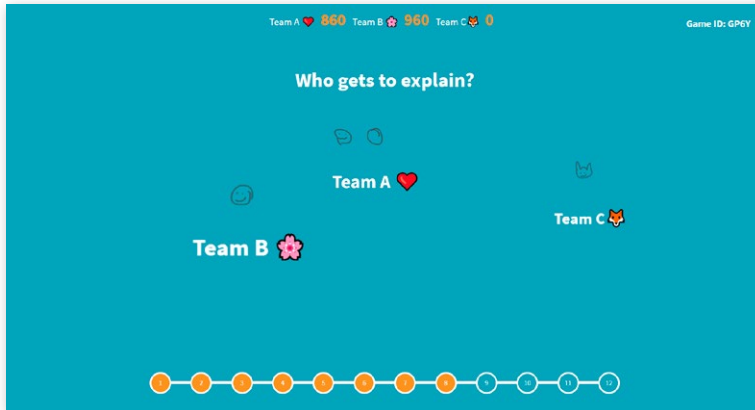


Shared screen

All teams' answers and scores are shown on the shared screen. The points awarded for multiple choice questions vary between 0 and 200 depending on the task.

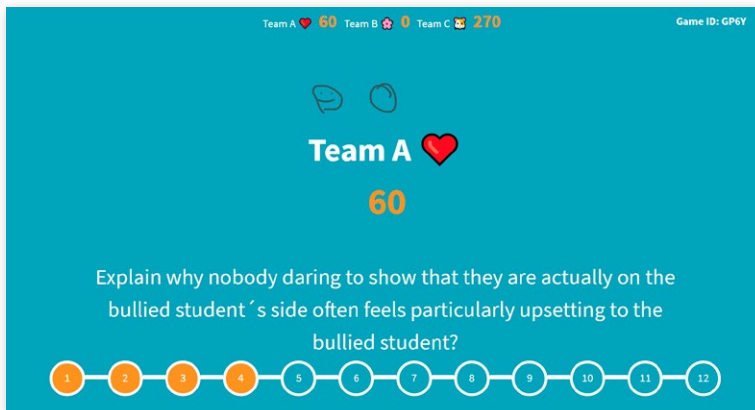


## EXPLANATION



Shared screen

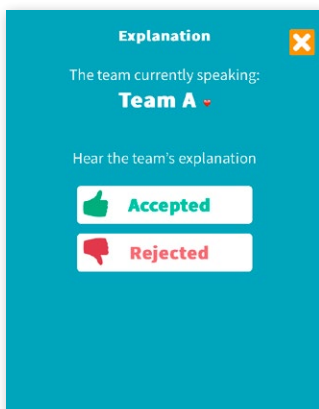
Once you move forward, the game randomly chooses one team to provide an explanation to a question presented by the game. The explanation is spoken out loud.



Shared screen

Once the answering team is chosen, the game automatically displays the question to explain.

**Encourage the chosen team to tell the group what they think about the issue featured in the question. Prompt the other students to listen to the explanation.**



Moderator's view

The moderator decides whether the explanation is good enough to score extra points. (More information about explanations is provided later in this manual.)

For an accepted explanation, the team scores 100 points.

Once you have accepted/rejected the explanation, the game moves to the score. After this, use the forward button to move to the next problem situation.

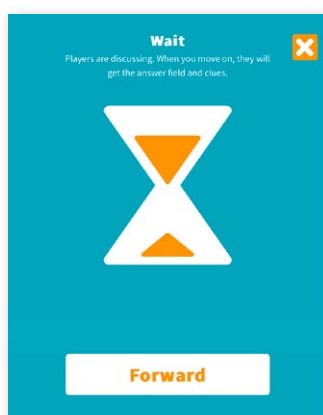


## OPEN QUESTION

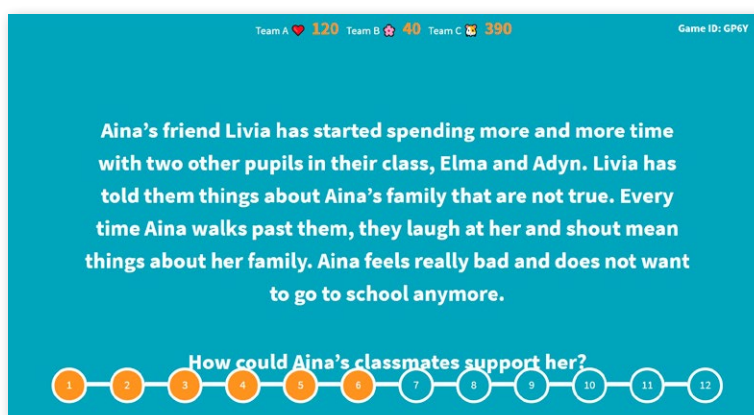
- Teams write a short answer in response to the problem situation described by the game. The game offers clues that help resolve the problem. **These questions are answered in teams.**
- The answers of all the teams are displayed on the shared screen. Then, the **students individually vote** for the best solution. You cannot vote for your own team's answer.

**Instruct the students to discuss the issue featured in the question.** You can read the situation description out loud.

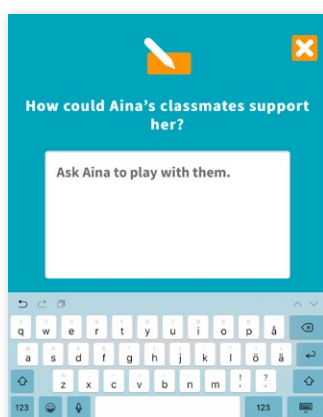
Once the students have discussed the issue for a while, **move forward** using your mobile device.



*Moderator's view*



*Shared screen*

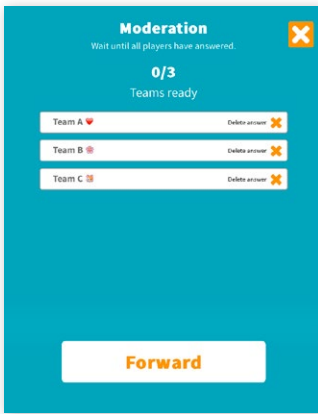


*Player's view*

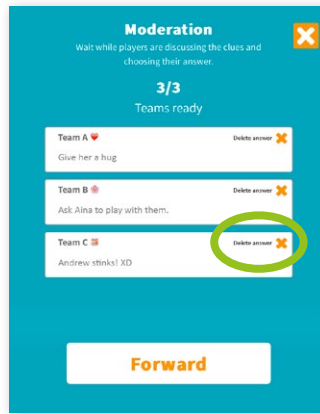
The students will receive clues that help them resolve the problem. One member of each team gets a display where the team enters its answer. The maximum length of the answer is 100 characters.

**Instruct the students to discuss the clues together and answer as a team.**



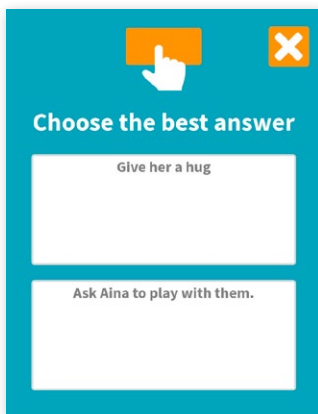


Moderator's view



Moderator's view

You can see the answers on your mobile device. If there is inappropriate content, you can delete such an answer using the “Remove answer” button. The team can enter a new answer.

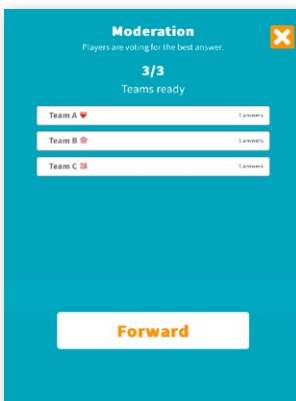


Player's view



Shared screen

Once you **move forward**, all answers and scores are displayed on the shared screen. Each player individually votes for the best answer using their own mobile device. You cannot vote for your own team's answer.



Moderator's view



Shared screen

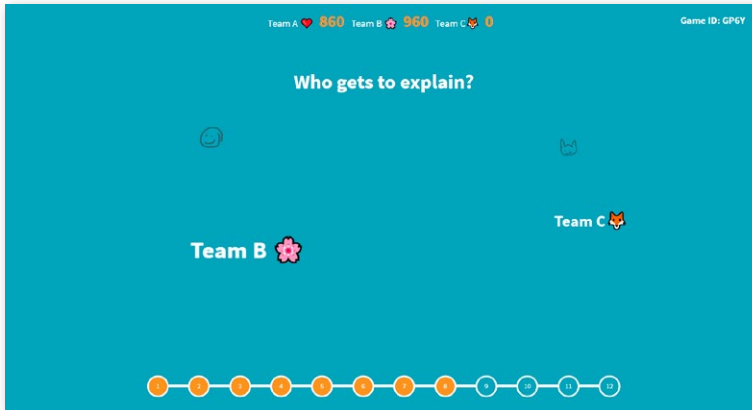
When all players have voted, **move forward** using your mobile device.

The vote and point scores are shown on the shared screen. Maximum score is 200.



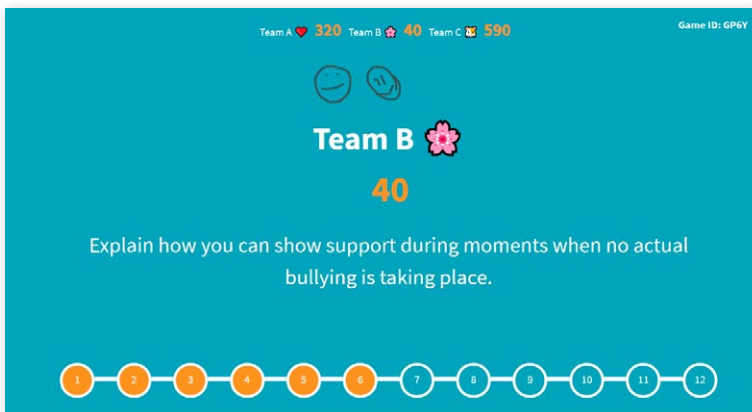


## EXPLANATION



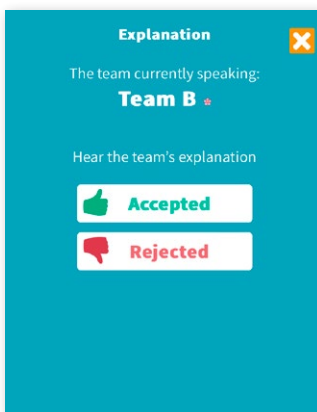
Shared screen

Once you **move forward**, the game randomly chooses one team to provide an explanation to a question presented by the game. The explanation is spoken out loud.



Shared screen

Once the answering team is chosen, the game automatically displays the question to explain. **Encourage the chosen team to tell the group what they think about the issue featured in the question. Prompt the other students to listen to the explanation.**

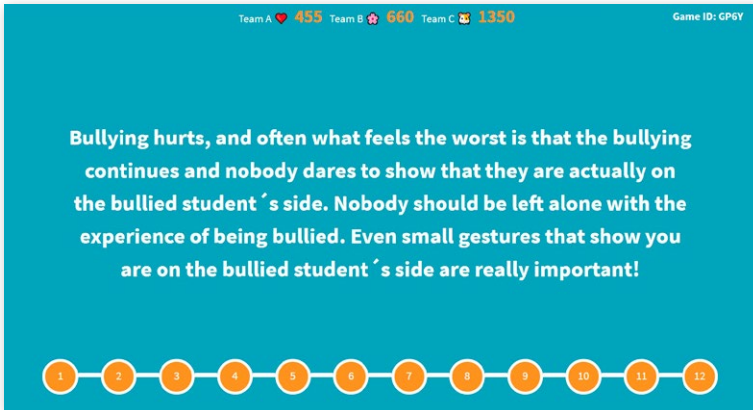


Moderator's view

The moderator decides whether the explanation is good enough to score extra points. Once you have accepted/rejected the explanation, the game moves to the score. After this, use the forward button to move to the next problem situation.

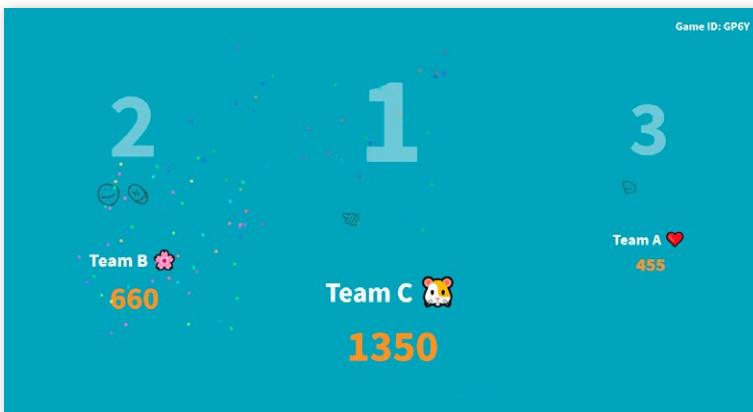


## CONCLUSION OF THE GAME



Shared screen

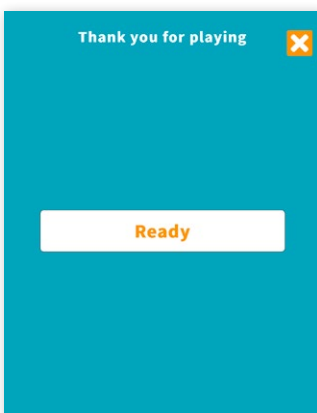
The numbered bullet symbols at the foot of the shared screen describe the progress of the game, and the last bullet marks a summary of the game. **After this phase, move forward once more to see the final score.**



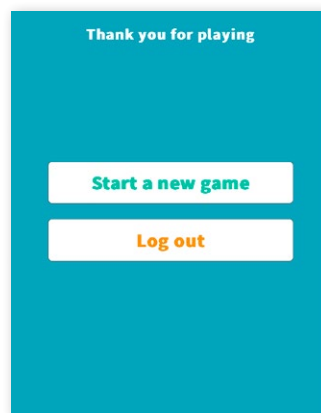
Shared screen

To exit the game, choose "Ready".

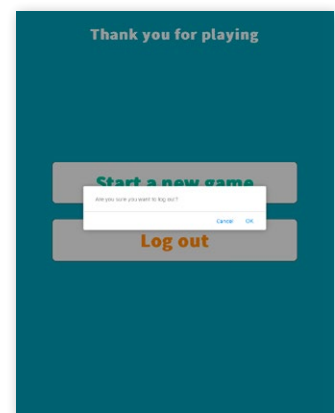
Remember to also **log out** from the game on your own mobile device.



Player's and Moderator's view



Moderator's view



Moderator's view



## What if...



### ...A STUDENT MUST LOG OUT FROM THE GAME?

Students can log out from the game on their own mobile devices using the logout icon at the top of the screen. Whenever a player leaves while the game is still in progress, the player should log out. If a player leaves without logging out, this player will remain in the team as a “ghost”. This means that this player may receive the field in which the answer should be entered, and in such a case the team could not answer. Before starting the game, it is wise to make sure that everyone’s mobile device has enough battery power to play.



### ...A STUDENT MUST LOG INTO THE GAME WHEN IT IS ALREADY IN PROGRESS?

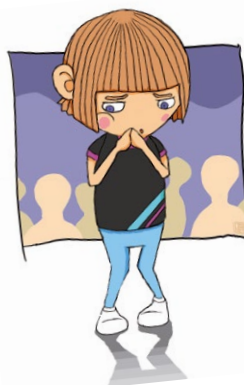
If a student enters the classroom when others are already playing, this student can join the game. The game code is always displayed at the top of the shared screen. Players log into the game at **pulmikas.net**. Remember to tell the student which team to join.

If a player is dropped from the game while it is still in progress, this player can also log back in as described above.



### ...A PLAYER’S MOBILE DEVICE FREEZES?

Sometimes a player’s mobile device may get stuck in the “Wait” display, even though the moderator has moved the game forward and all other players have moved forward. This problem can usually be resolved by choosing “Refresh” on the player’s mobile device. If this doesn’t help, the problem may be caused by a weak internet connection, for example.



### ...A PLAYER’S MOBILE DEVICE SCREEN DOES NOT SCALE PROPERLY UPON LOGIN?

If the device screen does not scale properly and the image is too large, the first step is to make sure that the player has not accidentally gone to the address **pulmikas.net/en/screen**, which is the page where the moderator launches the shared screen. If the player is on the right page but the scaling is nevertheless wrong, it may be that the mobile device does not support the game.



# Scoring

1.

With **fact questions**, the maximum score is **120** points. The game accounts for the number of players in each team so that even if not all teams have the same number of players, all teams can nevertheless achieve the maximum score.



2.

In **multiple choice questions**, the points vary between **0 and 200**. Different point scores are awarded for different tasks. Often, one option is more accurate than the others, but other choices may also bring points. In some questions, all options bring the same points.



3.

In **open questions**, the team whose answer receives the most votes gets **200** points. The other teams are given either 200, 100 or 50 points according to the number of votes given. Teams that did not receive any votes but nevertheless answered the question, get 20 points.



4.

For an **accepted explanation**, the team scores **100** points.



# Gameplay tips

## THE PURPOSE OF THE GAME IS TO EVOKE DISCUSSION

At first, the moderator may need to focus on forwarding the game so that less attention is paid to steering discussion. This will get easier as you gain experience in playing and moderating the game. Gameplay can be used for encouraging students to discuss topics that are relevant in their lives.

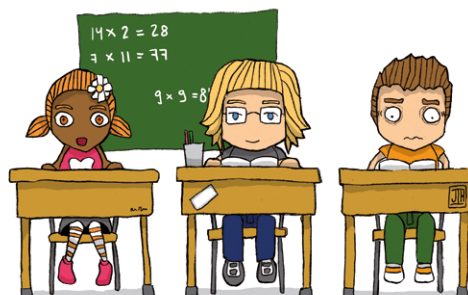
**Remember that the game is not about mechanical point scoring – it is an interaction tool.**

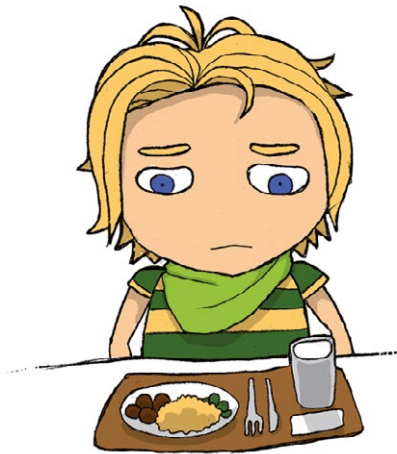
It is advisable to promote interaction from the very beginning of the game, for example, by jointly introducing all team names. If you want to add excitement, you can stop and look at the point standings together during the game.

The primary objective of the game is to get the students talking about the matters at hand. Most of the discussion takes place within the teams. However, **the moderator can also raise joint discussions**, for example on the teams' answers to open questions or some of the optional answers offered by the game.

The game scripts and correct answers are based on research findings, but it is always useful to discuss different perspectives. For example, if several teams choose a wrong alternative or object to the correct answer, this may convey important information about the culture prevailing in the group or school or about the students' attitudes towards the topic at hand.

The moderator should read the situation descriptions and other game texts out loud from the shared screen. This draws everyone's attention to the point. Moderating the game may be easier if the moderator reads the scripts in advance. Following the script, the moderator can more easily keep up with the clues offered to players, points awarded for different options, and the next step in the game.





## PACING THE GAME

The moderator moves the game forward using their own mobile device. In this way, the moderator sets the pace of the game. If the group consists of students who are easily distracted, you can move forward at a brisk pace. It is sometimes good to urge teams to answer quickly.

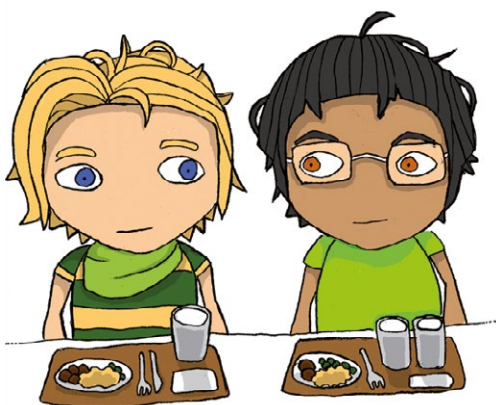
The biggest differences in answering speed usually come up with open questions. In these situations, the moderator can tell the group how many teams have not answered yet or even name the teams that have/haven't answered.

For some groups, a slower pace with pauses for general discussion is a better approach. Of course, general discussion and dynamic progress in the game are not mutually exclusive! You can engage the students in general discussion whilst also pacing the answering times so that all teams answer as simultaneously as possible.



## REMOVING OPEN ANSWERS

**The moderator sees the teams' answers to open questions before they appear on the shared screen.** The moderator can also remove an answer that is inappropriate or insulting, for example, and ask the team to write another answer. However, sometimes "peer pressure" is a better solution than removing the answer: as all answers are shown and the students notice that most of them are appropriate and smart, they might not want to answer indecently again.



## GIVING EXPLANATIONS

After each multiple choice question and open question, the game randomly chooses one team to provide an explanation to a question presented by the game. The explanation is spoken out loud. Once the answering team is chosen, the game automatically displays the question to explain. **The explanation may be related to the team's answer** (e.g. "Tell us how the option you suggested will help the group?") **or some other matter relevant to the problem situation at hand** (e.g. "Tell us why none of the suggested options is a good solution to this situation?" or "Why is it important to discuss the common goals and expectations at the beginning of group work?").

After hearing the explanation, the moderator decides whether it is good enough to score extra points. Students are often good at explaining their opinions about the questions presented by the game. In their explanations, they bring up matters they have discussed earlier, and they also take advantage of the clues provided by the game.

It is not always easy to provide arguments in support of your viewpoint, and sometimes the team may need extra support. If the explanation remains superficial, you can encourage the students to see whether the clues offered by the game could help them explain their answer even better. It is also good to encourage even the quieter members of the team to contribute to the explanation.



The moderator can also encourage other teams to ask further questions from the team that is providing an explanation. The questions can even be critical, i.e. other teams can challenge the explanation.

On the other hand, sometimes it's best to **let the team formulate and express its explanation undisturbed**. Different approaches work with different groups and in different situations. It is important to be fair and equal: if you encourage others to ask further questions from one team when it's their turn to offer an explanation, you should do the same with all teams.

**The general level of the group determines the threshold of acceptable explanations.** In some groups, you may be able to require quite structured argumentation, whereas in other groups just being able to speak up in front of the group may be enough. Again, fairness and equal treatment is essential.

In some groups it may also be a good idea to **involve the whole group in rating the explanation** and let the other players decide whether the explanation was good enough to score points and if so, why. This increases the students' motivation to listen to other teams' explanations carefully and form their own opinion about them. This is, eventually, the moderator's choice.

Have fun with the Pulmikas game!







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