

TEAM

PROJECT 2:

FIGHTING CANCER WITH SPACE

SCIENCE

Did you know your teacher is a billionaire?! They are looking for business investments or to give money to charitable projects. You need to persuade the billionaire to give money to your project.

Your project is about fighting cancer using space science and technology. You are pitching to carry out experiments on cancerous cells in microgravity. Might your experiments be carried out by astronauts on the International Space Station? Would you send up your own unmanned miniature lab to orbit the Earth?

YOUR TASK

Prepare and deliver a 3-minute winning pitch to your billionaire teacher:

- ▶ Choose any form of pitch such as film, infographic, live presentation.
- ▶ Use any kind of relevant material.
- ▶ **Engaging beginning** – to get your billionaire’s attention and so they know what your project is about.
- ▶ **Strong middle** - how your project will work and how much it will cost.
- ▶ **Memorable ending** – what difference your project will make to the planet and our lives!

20 minutes to prepare your pitch:

- ▶ 5 minutes to plan
- ▶ 10 minutes to research
- ▶ 5 minutes to practice

Choose a team role (you don’t have to use them all, or you can have more than one person with that role):

- ▶ **Team leader** to guide the team and make the best of people’s skills and interests.
- ▶ **Presenter** to deliver the pitch to the billionaire.
- ▶ **Researcher** to look up the material you use in your presentation.
- ▶ **Graphic designer** to take care of how your presentation looks.
- ▶ **Financial manager** to plan how much money to ask for and on what it will spent.
- ▶ **Lawyer** to look after any disputes and make sure your project is legal.



PROJECT INFORMATION (clues to help you)

- ▶ Find your school on google maps and then zoom out. The Earth is a big place, with billions of people on it!
- ▶ What is microgravity? Where do we mostly find it?
- ▶ What percentage of people will be affected by cancer in our lives? **(Clue!)** toss a coin to find out!
- ▶ Think about these things and include your ideas in your pitch.

The links below could help you to provide evidence to persuade the billionaire. The billionaire might not be very familiar with what microgravity is, so make sure you can explain that to them.

https://www.youtube.com/watch?v=u53JU_Pm7FU This short clip tells us about the difficulties of growing cancerous cells for research on earth and how the microgravity of space can help. Make sure to mention this to the billionaire. You need their money to fight cancer and save lives!

https://www.nasa.gov/audience/foreducators/k-4/features/F_Drop_Everything.html Drop towers are a way to simulate microgravity here on earth. Why is your project better than building a drop tower?

IMAGES

What images might help with delivering your pitch?

Find or draw an image of a cancerous cell

Find or draw an image of the International space station. You could use it in your pitch as an example of where microgravity experiments can be carried out in space.

Can you find and use an image of a microgravity incubator in your pitch?

PITCH IDEAS

- ▶ How can you get the billionaire to think about gravity and its effects, so they can understand what microgravity is? **(Clue!)** Get them to jump up and ask them what brings them down!
- ▶ Maybe make and use a model of a cancerous cell grown in microgravity and then in normal gravity. **(Clue!)** The cell in microgravity model could be a piece of A4 paper that is rolled into a tube. Hand it to the billionaire and get them to crush it between their hands. The shape of a cell changes when it is outside the body and gravity is the greatest force acting on it.

