

Brontosaurus Learning

Making science fun!

Challenge!

The Big Egg Drop

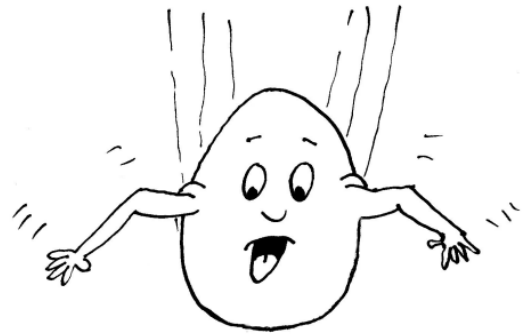


The challenge:

To build a structure to protect a raw egg from breaking when dropped from

The rules:

- 1 You may use any recycled materials you like, but your finished invention should be no bigger than 30 cm/12 in long in any direction.
- 2 Some material you might like to consider:
 - Corrugated cardboard
 - Bubble wrap
 - Plastic bags
 - String
 - Packing foam etc



What is going to happen?

On _____ the class will gather at _____

to drop your eggs. To succeed your egg must survive the fall unbroken and intact.

Hints:

- Keep your design simple – there will be less to go wrong.
- Remember it's not just about protecting the egg, you can also slow down its fall.
- Practice if you can – test your theories at home by holding the egg as high as you can reach and dropping it onto the ground. Watch what happens. **Do not climb on anything or drop eggs from high places without supervision – it could be very dangerous to yourself or to people below.**

TEACHING NOTES:

Brontosaurus Learning Challenge 01

Lesson Notes:

On this note you will need to fill in the blanks about the location and date of the egg drop, which you will need to have organised first. Obviously the higher the fall the bigger the challenge, but simply dropping the eggs from a first storey balcony will be enough. Obviously safety is your main concern, so the location will have to be safe for the students dropping the eggs but you must also be able to ensure that no one will walk beneath the egg drop area! Depending on your situation you can also allocate a staff member to drop the eggs one at a time while the students watch from a safe distance below.

How much assistance you give to your class for this project is up to you and will depend on the age and ability of the students. I suggest you start with:

- a discussion of the challenge,
- answering questions about the rules and,
- Giving a few clues including the importance of slowing the egg down as it falls.

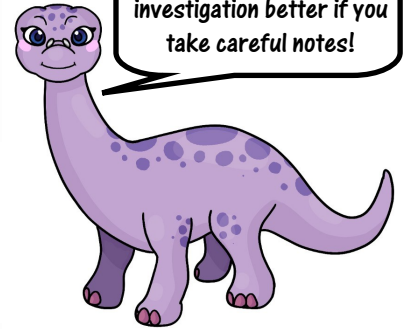
The students can work on this challenge in class by bringing in recycled materials from home, or it can be a homework assignment. These can be great fun for families to work on together, but be aware that not all students will receive the same amount of help.

You may also choose to offer a prize for the best invention, but be sure to decide on the criteria (inventiveness, teamwork, best decorated etc) in advance unless you plan to have a prize for every successful drop.

Why not issue a challenge to other classes or even nearby schools to join you?

Perhaps the parents could be invited to join in the festivities too – make a day of it!

Investigation Record



Experiment Title:

Scientist (that's you!):

Materials: What will I need?

Investigation—what am I going to do in this experiment?



Diagrams are a great idea!

Hypothesis: What I think will happen:

Observation: What I SAW happen:

Diagrams are a great idea!



From my investigation I learnt:

Great work scientist!