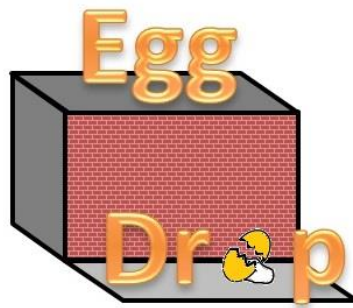


Time: 1 hour

Level: Form I-IV



How it Works

Students must build a device to transport an egg through a given drop distance without cracking.

What You Need (per team)

- | | | |
|---|--|--|
| <input type="checkbox"/> Plain paper - 4 sheets | <input type="checkbox"/> Straws - 10 | <input type="checkbox"/> Paper clips - 10 |
| <input type="checkbox"/> Plastic bag - 2 | <input type="checkbox"/> Toothpicks - 10 | <input type="checkbox"/> Toilet paper - 1 roll |
| <input type="checkbox"/> String - 1 metre | <input type="checkbox"/> Tongue depressors - 4 | <input type="checkbox"/> Bottle (500 ml) - 1 |
| <input type="checkbox"/> Masking tape - 1 roll | <input type="checkbox"/> Rubber bands - 4 | <input type="checkbox"/> Newspaper - 1 sheet |
| <input type="checkbox"/> Balloons - 4 | <input type="checkbox"/> Index cards - 4 | <input type="checkbox"/> Egg - 1 |

RULES

- 45 minute time limit for construction.
- Devices dropped from a height of 3-5 meters.
- Teams can use only the materials given, but do not need to use everything.
- Egg is placed at time of testing. It must be possible to place and remove egg freely without altering the device.
- Once egg is placed, no further adjustments may be made. This means the egg cannot have any kind of "seat belt" or strap fastened after placing the egg.

Points

Egg Survives: 50 pts

Egg Cracks: 0 pts

Extra Materials

Ladder / chair

Scissors for community use

Notes:

- ★ Do not give eggs to teams until time of testing.
- ★ If possible, increase drop height for surviving eggs and give bonus 25 pts for each additional successful drop.

Take It Further

- Did students utilize the parachute concept? If not, show a brief example. How does this help to protect the egg?