

HOW CAN MR GRINLING GET HIS LUNCH QUICKLY?



KEY STAGE 1



Always follow the health and safety policy in school and carry out a risk assessment.

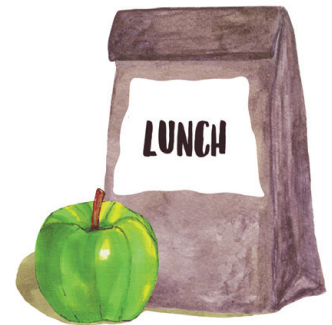


Sources of energy in the world. (Movement and Energy 1)



Energy is the ability to do work, and work is movement against a force. (Movement and Energy)

STEM ENQUIRY



LEARNING INTENTIONS

- An object will remain stationary unless a push or a pull is applied.
- The degree of a push or a pull may bring about a change in the movement of an object. The push or pull may speed up or slow down.

EQUIPMENT

- Ball of string
- Balloons (different shapes)
- Drinking straw
- Sticky tape
- Paper cup (Mr Grinling's lunch box)
- Timer
- Clothes peg

PREPARATION

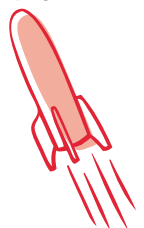
Read the story 'The Lighthouse Keeper's Lunch' by Rhonda and David Armitage to the class.

IDEAS TO TRY

Discuss ways that Mr Grinling could get his lunch even faster to prevent the seagulls from eating it. Record all ideas and encourage the more far-fetched ones!

Make a 'rocket' to deliver his lunch.

1. Tape one end of a length of string to a chair and pull the other end through a drinking straw.
2. Attach the string to another chair so that the string is taut.
3. Blow up the balloon but don't tie it or let the air out. Tip: use the clothes peg!
4. Holding the balloon, attach it to the straw using sticky tape.
5. Start the balloon rocket at one end of the string and let it go!
6. Pupils can discuss and record their observations.



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STEM ENQUIRY CONTINUED

CONSIDER AND DISCUSS

Investigate how far the balloon rocket can travel.

Can you attach a paper cup (Mr Grinling's lunch box) to the straw at the front of the rocket?

Will the rocket still move?

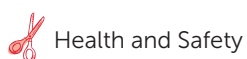
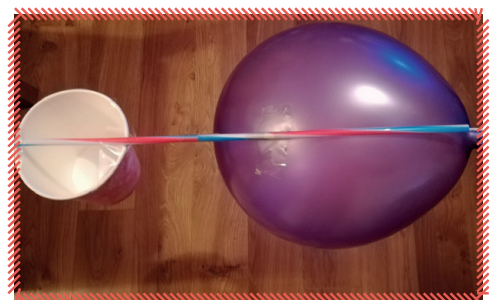
Does the addition of Mr Grinling's lunchbox slow the rocket down?

Can you time how long the balloon rocket takes?

Try using different shapes of balloons. Does this change the time it takes for Mr Grinling to get his lunch?

OTHER IDEAS

Design and make a lighthouse using cardboard cones/tubes.



Health and Safety



Statutory Requirement



Key Scientific Idea

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