

Season 2/Episode 20

Spinning Snake (Investigating 'Hot Air')

Let's Find Out features Captain Zoom and her crew of scientists with exciting experiments, curious kids and a trip to a faraway place. Produced with support from Science Foundation Ireland.

Class Level: First/Second Class Strand: Energy and Forces

Strand Unit: Hea

Content Objective: • Become aware of different sources of heat energy

Assessment Method(s):

- Teacher observation
- Teacher designed tasks and tests
- Work samples
- Self-assessment

- Conferencing
- Portfolio assessment
- Concept mapping
- Questioning





Lesson: Spinning Snake

Lesson Introduction

- The teacher will begin the lesson using WALT and WILF.
- Question the children on their prior knowledge of hot air.
- Click <u>HERE</u> for a whole class demonstration on the experiment.
 (https://www.youtube.com/watch?v=lpBZhBVjyrQ&list=PLer4jkNChuybHYhU-YSs5LW-TuLKz_SQk&index=21)

Lesson Development

- Place the plate on top of the paper and use it to draw a circular shape.
- Ask an adult to cut the circle out with scissors.
- Now draw a spiral shape from the outside of your circle to the middle point of the circle. Make the spiral a few centimetres wide. (You can check out the video link to see how to make the shape on your paper plate)
- Again, ask an adult to cut along the spiral line with the scissors.
- This spiral is your curled up paper snake, use the coloured pens to decorate it.
- Once your snake is ready, attach a short length of thread to the top of his head with tape.
- Ask an adult to press down the toaster and hold your snake about 10 to 15 centimetres above the toaster.
- After a few moments you should notice that your snake starts to spin.

Lesson Conclusion

- Talk and Discussion
- Discuss children's observations





Lesson: Spinning Snake

Resources	Methodologies	Linkage/Integration
Some paper A small plate Coloured pens or pencils Tape Thread or string A scissors A toaster	Talk and Discussion Active Learning Skills through Content Use of the Local Environment Problem Solving	Add in at teacher's discretion

Inclusion and Diversity/Differentiation (Differentiate at teacher's discretion)

Content: Activities: Resources:

Product: Environment: Teaching Strategies:

Scientific Explanation:

Why does your snake spin? It is all down to what happens when air is warmed up. As the toaster gets hot it starts to warm up the air above it and warm air always rises so the air above the toaster starts to move upwards. As this moving air passes by your snake, it makes the snake move too and because the snake is a spiral shape, it turns in circles and spins!



