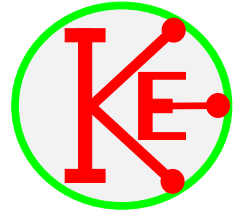


8 Rising air



EQUIPMENT

- Paper spiral templates
- Pencils
- Colouring materials - felt tip pens, crayons etc
- Cotton thread
- Sellotape
- Scissors
- Pritt-Stik type glue
- Thin card
- Picture of a colour wheel
- 60W incandescent lamp in metal cage (source of heat)
- Telescopic aerial with drawing pin fixed to top on a clamp stand (to support spiral over lamp)

RISKS

Paper cuts.

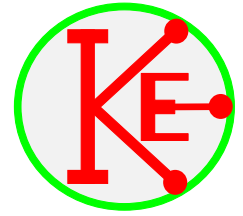
Scissor cuts.

Remind students of dangers of holding the paper spirals over a naked flame.

SESSION

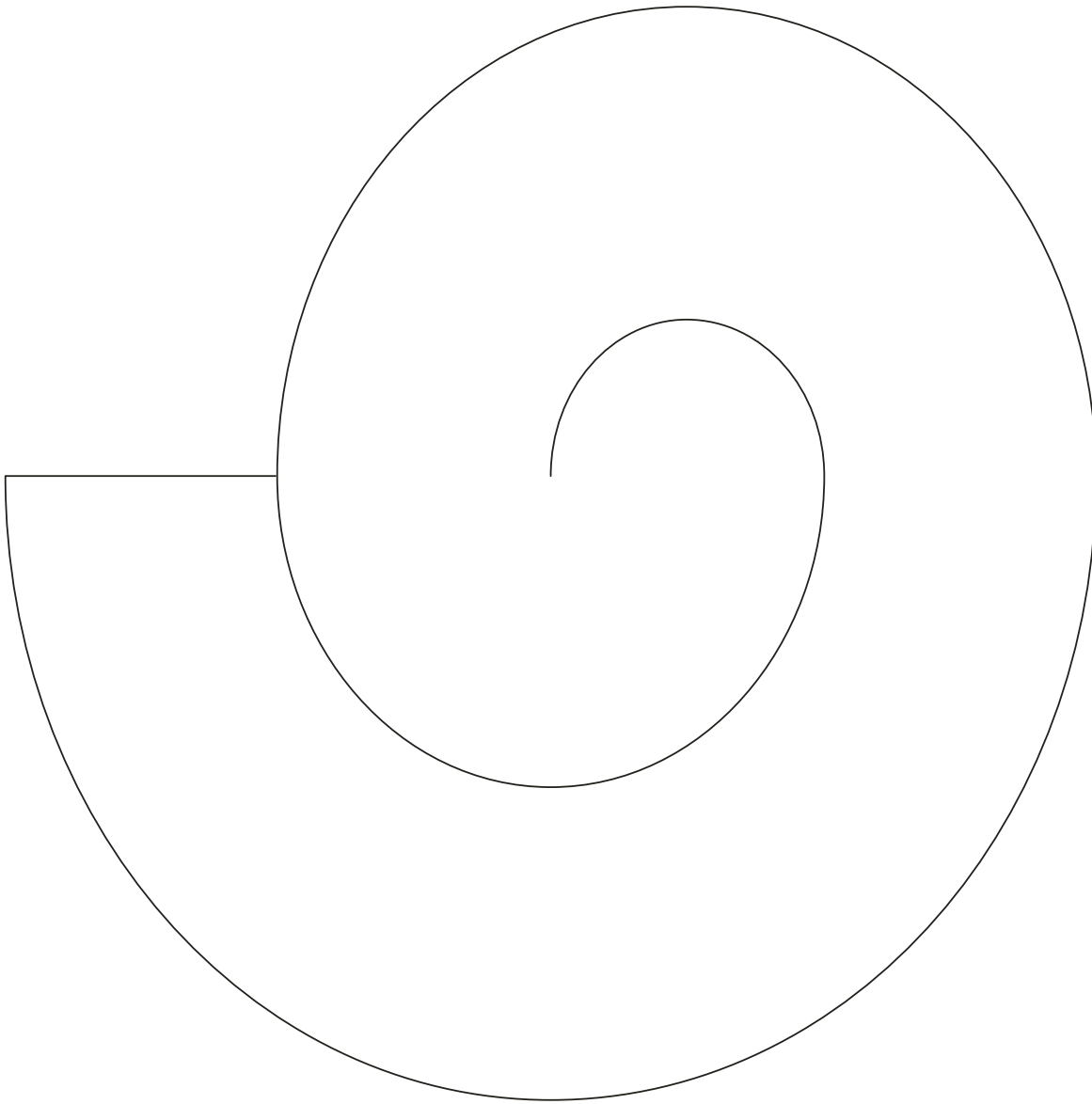
- 1). Show video of hot air balloon.
Discuss why the hot air balloon floats. Relate to the Rafts investigation.
- 2). Show animation of land and sea breezes.
Discuss why this occurs.
- 3). Discuss heat energy moving by Convection.
Demonstrate how a spiral can show convection over e.g. a radiator.
A telescopic aerial with a drawing pin stuck to the end makes a good support for a spiral.
- 4). Explain how to make the spiral. Essential to find balance point.
If balance point correctly found then it will rotate even from the warmth of hands.
Briefly discuss colour wheel for decorating spiral
Hot and cold colours, complementary colours

8 Rising air

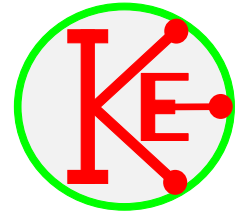


METHOD

- 1). Decorate the spiral below. Remember the ideas of warm and cold colours and complementary colours.
- 2). Carefully cut out the spiral.
- 3). With the aid of a pencil, carefully find the balance point of the spiral. Make a small hole at this place with the pencil.
- 4). Thread a piece of cotton thread through the hole and secure it to the spiral with a small piece of Sellotape.
- 5). Hold the spiral by the thread over a radiator - note what happens.
- 6). Investigate other spirals - thin ones, spirals stuck onto thin card, etc
Which ones work the best?



8 Rising air



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