

Physics - Key Stage 3 - Energy

Lesson 6: Convection

Mrs Evans



Independent practice: answer the questions

1. Which states of matter can convection occur in?
2. What states of matter can't convection occur in?
3. When particles move faster, which energy store has been increased?
4. What rises in convection?
5. Why does your answer to question 3 rise?



Independent Practice: order these stages of a convection current

- a. The hotter fluid is less dense and rises
- b. A fluid is heated by a Bunsen burner
- c. The kinetic store of the particles increases
- d. The kinetic store of the particles decreases
- e. When the heated particles move up away from the Bunsen burner, they start to cool
- f. The heated particles move around faster and spread further apart
- g. The cycle continues creating a current
- h. The cooling particles move around slower and back closer together
- i. The cooler fluid is more dense and sinks



Independent task: choose A or B

In which area...

1. ... is the temperature higher?
2. ... is the temperature lower?
3. ... do the particles have less energy in the kinetic store?
4. ... do the particles have more energy in the kinetic store?
5. ... are the particles further apart?
6. ... are the particles closer together?
7. ... are the particles less densely packed?
8. ... are the particles more densely packed?

