

CurriculumVisions Lesson

Students: fill in next to the word answer and return the document for assessment.

Science

Book: Solids and liquids (4D)

Pages 10-17

Everything here is based on our Curriculum Visions book Solids and liquids (4D).

In this segment, we are going to think about liquids.

You will need to go to pages 10-11 of the book. How are the particles in a liquid different from the particles in a solid?

Answers.....

The particles in a liquid are unstuck/farther apart than in a solid and are free to move around. A liquid has no fixed shape – it takes the shape of whatever container it is in. A liquid cannot be squashed.

Go to pages 12-13

Choose two different liquids. Design an experiment to test which of the two is runnier. If your teacher approves, try it out. Why did it work/not work?

Answers will vary.....

Encourage students to choose liquids of different densities, such as golden syrup and apple juice.

How can you make a liquid runnier?

Answer.....

By warming it up.

Go to pages 14-15

Draw a picture showing what happens when you warm up a liquid from the bottom of a container. Now draw a picture showing what happens when you warm up a liquid from the top of a container.

Answers will vary.....

Encourage students to use different colours, such as red for warm and blue for cold, and arrows showing the way the liquid moves.

Go to pages 16-17

Both liquids and metals swell up, or expand, when they are hot and shrink when they cool down. What are some ways that this information has been used by make practical items?

Answers.....

The information has been used to make thermometers of liquid and metal and to make iron rims on wooden wagon wheels.

Design a thermometer that uses a liquid. If your teacher agrees, go ahead and build it. Why does it work?

Answer.....

It works because the liquid expands as it heats up and moves up the tube.

If you are interested in this topic continue to browse the book and watch our amazing videos. They start right on the book cover.