

Year Group: Year 3 & 4

Length: 26 mins

Starting Positions: Sit in your own space on the floor

Learning Intentions:

To...

- Compare and group materials together, according to whether they are solids, liquids or gases
- Observe that some materials change state when they are heated or cooled

Synopsis:

- You are an alien from another planet, a 'Squidge', travelling to earth with your fellow Squidges. Your planet was destroyed and you're looking for a new, stable home.
- Unlike your old squidgy home, Planet Earth is nice and firm with trees, seas, fresh air – made up of three types of materials: solids, liquids, and gasses. You are tasked with collecting samples of all three.
- Your spaceship crash-lands onto rocks, and you take a sample of the solid. One down, two to go!
- Close to the road there is an awful smell – exhaust fumes from passing cars. This is not a suitable gas sample; instead you look elsewhere, shrinking yourself and your brother to follow two human children.
- At their house you overhear a TV news broadcast that aliens have landed. Suddenly the boy, Dylan, spots you in the corner.
- You accidentally shrink yourself even smaller, to the size of a particle. You see the solid, tightly packed particles of the door on front of you.
- Dylan grabs your brother and takes him away. Dylan is going to a party later with his sister, Jess.
- You follow Jess into her kitchen – she's making a chocolate cake for the party.
- You fall into the kettle and see the movement of the water particles as they boil. You grab on to a gas particle to float out of the kettle.
- You fall down into the bowl of melted chocolate, then manage to hide behind a candle on the cake.
- At the party, you tell Jess why you're visiting earth and that you need to find your brother.
- She helps you rescue your brother from the freezer and you escape by holding onto a balloon that floats up into the air, bringing you back to your spaceship. Mission accomplished.

Characters

- **Big Squidge** - military-style leader of the Squidges
- **Sqwag** - Big Squidge's assistant, geeky brainy type
- **Sqwig** - our younger brother, naughty and wayward
- **Dylan** - a cruel human boy who wants to catch us
- **Jessie** - a kind human girl who wants to help us

Locations:

- Spaceship
- Park
- Dylan & Jessie's house
- Car
- Party

Glossary:

- **Particle** – a minute portion of matter
- **Exhaust fumes** – gases ejected from a car as waste
- **Evaporation** – process by which liquid turns into vapour, through heating
- **Freezing** – process by which liquids turn into solids, through cooling
- **Melting** – process by which solids turn to liquid, through heating

Discussion:

Story & Factual

- Why were you visiting Earth and not any other planet? What happened to your planet?
- What three materials were you looking for on Earth?
- When you landed, why didn't you collect the gas found by the side of the road?
- When you were the size of a particle, how did the particles of the door behave? What about the particles of the water in the kettle? And the particles of the evaporating water?
- What did you do to the ice to save your brother?
- If you wanted to turn liquid back into a solid, what would you have to do?
- If you wanted to turn liquid into a gas, what would you have to do?
- What made the water particles rise upwards? What made the balloon rise upwards?

PSHE & Philosophical

- Can you think of any other gases, like exhaust fumes, which are damaging the environment?
- Do you think there is life on other planets? If so, why do you think we haven't found it yet?
- If you found an alien, would you report it to the police (like Dylan) or try keep it safe (like Jess)?
- If you were able to shrink down to the size of a particle, what would you do with that superpower? Would you use it for good, or mischief?

Resources:

You'll find these follow up resources on your shared drive:

- **Literacy Resources** – 5 creative writing ideas
- **Photo Storyboard** – order the images from the story (or use them for other things – e.g. writing)
- **Quick Quiz** – re-cap key facts
- **Or try some recount, report or creative writing ideas of your own!**