



Year 6 Perfect Polymers - Chemistry in Action

TEACHER REFERENCE GUIDE

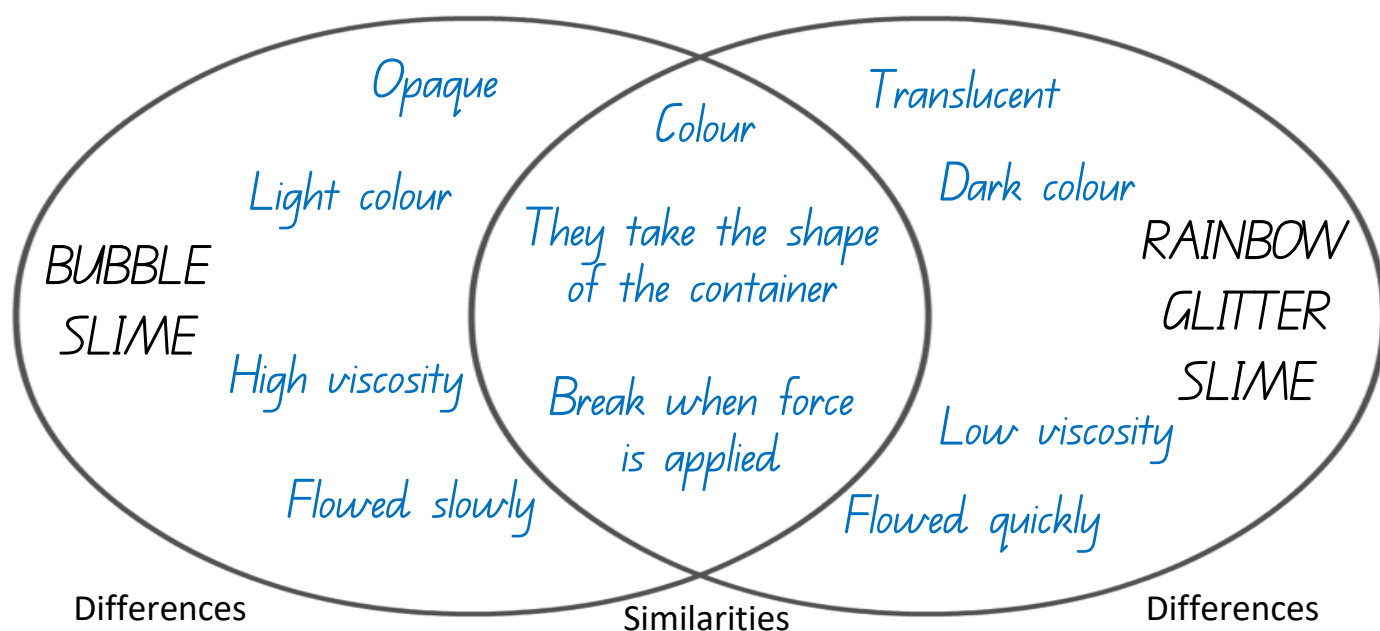
As a Street Science junior scientist, you used **fair testing** to observe how changing a **variable** can affect results, and how changes to materials can be either **reversible or irreversible**.

- In your first experiment, you ran a **fair test** to find out how changing one **variable** affected the physical properties of your slime. In the table below, identify which materials were kept constant and which were variable.

Materials: PVA solution Cornflour Activating agent Glitter

CONSTANT (kept the same)	VARIABLE (changed)
<ul style="list-style-type: none"> PVA solution Activating agent 	<ul style="list-style-type: none"> Glitter Cornflour

- We used **adjectives** to describe properties of the slime. Add adjectives to the Venn diagram below to summarise **differences and similarities** in the physical properties of your two polymers.





3. In science, we say some changes are easily **reversible** while others are **irreversible**. Use a dictionary (or the internet) to find the definitions of these words:

Reversible - e.g. Capable of being reversed so the previous state is restored.

e.g. Capable of going through a series of actions (or changes) either backward or forward.

Irreversible - e.g. Not reversible; not able to be undone or altered.

e.g. Impossible to change back to a previous condition or state.

4. For each of the experiments you completed with Street Science, identify if they are reversible or irreversible and explain why.

The slime experiment was an irreversible change because once the materials were mixed together they changed into a new chemical and couldn't be separated again.

The snow experiment was a reversible change because the water can evaporate from the snow leaving the dry powder. This dry powder can then be made back into snow by adding water.