



Rock Cycle Modelling **Answers**

1. Record what you see when you open your tinfoil packet for the first time.

What type of rock does it represent?

sedimentary

Explain how this type of rock is formed.

Small pieces of sediment are compacted and cemented together.

2. Open your packet again. Record what you see.

What type of rock does it represent?

metamorphic

Explain how this type of rock is formed.

Sedimentary rock is heated and put under pressure by the earth.

3. Open the packet for the final time. Record what you see.

What type of rock does it represent?

igneous

Explain how this type of rock is formed.

Rocks underground are melted by the high temperatures. Molten rock (magma) cools and solidifies.



4. Describe the processes represented through the models you created. Try to use all the keywords.

erosion	weathering	cementation	compaction	heat	pressure
magma	igneous	sedimentary	metamorphic	melting	cooling

- **Rocks are weathered, causing small pieces of rock to break off. The rock particles are moved by erosion and deposited in layers. This was represented by shaving the pieces of chocolate onto the tinfoil.**
- **The layers of rock particles are compacted and cemented together. This forms sedimentary rock. This was represented by hitting the tinfoil packet with your fist.**
- **Rocks are heated and put under pressure by the earth. This forms metamorphic rock. This was represented by holding the tinfoil packets between your hands and pressing firmly.**
- **Rocks underground get heated and turn into magma by melting. This was represented by placing the tinfoil packet into a beaker of hot water for one minute.**
- **Magma cools and solidifies to form igneous rock. This was represented by allowing the chocolate to cool.**