

Rocks, their formation and the rock cycle

How can rocks change from one form to another?

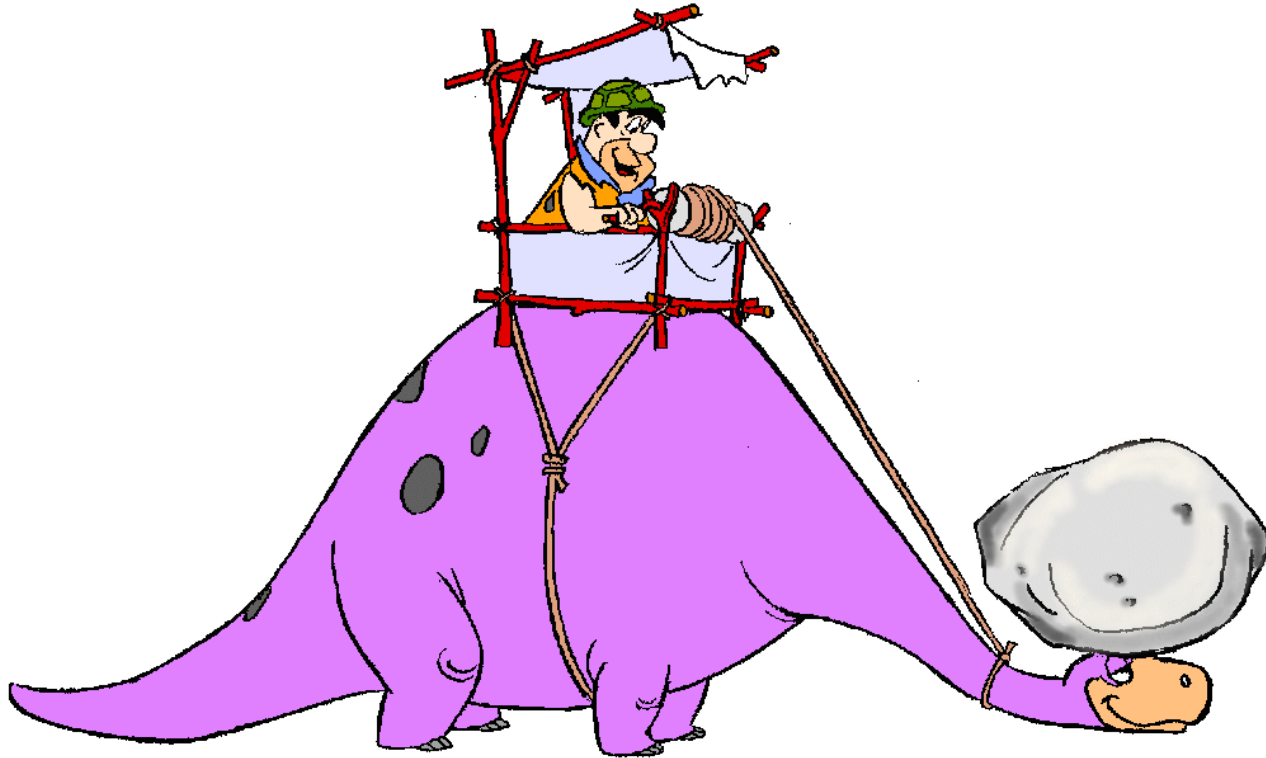
- D: Identify examples of igneous, sedimentary and metamorphic rocks
- C: Describe features of igneous, sedimentary and metamorphic rocks
- B: Explain how different rock types are formed
- A: Analyse how rocks are changed and recycled
- A*: Link how rate of cooling affects igneous rock structure

Starter:

- What is your starting level for this topic?
- Can you sort all the different rock types into igneous, sedimentary and metamorphic rocks? –

You will need to work together as a team!

Spot the Rock



Help Fred Flintstone identify the rocks he's dug out of the quarry

Metamorphic

- Schist



Sedimentary

[Home](#)

- Conglomerate



Sedimentary

- Mudstone



Sedimentary

- Sandstone



Sedimentary

- Chalk



Igneous

[Home](#)

* Obsidian



Sedimentary

- Limestone



Igneous

[Home](#)

- Quartz



Metamorphic

- Marble



Igneous

- Granite



Metamorphic

- Slate



5cm

Igneous

- Basalt



Metamorphic

- Anomaly.....



Rocks, their formation and the rock cycle

How can rocks change from one form to another?

- D: Identify examples of igneous, sedimentary and metamorphic rocks
- C: Describe features of igneous, sedimentary and metamorphic rocks
- B: Explain how different rock types are formed
- A: Analyse how rocks are changed and recycled
- A*: Link how rate of cooling affects igneous rock structure

- Learning check.....
- How has your grade progressed?

Match the words with the correct definition

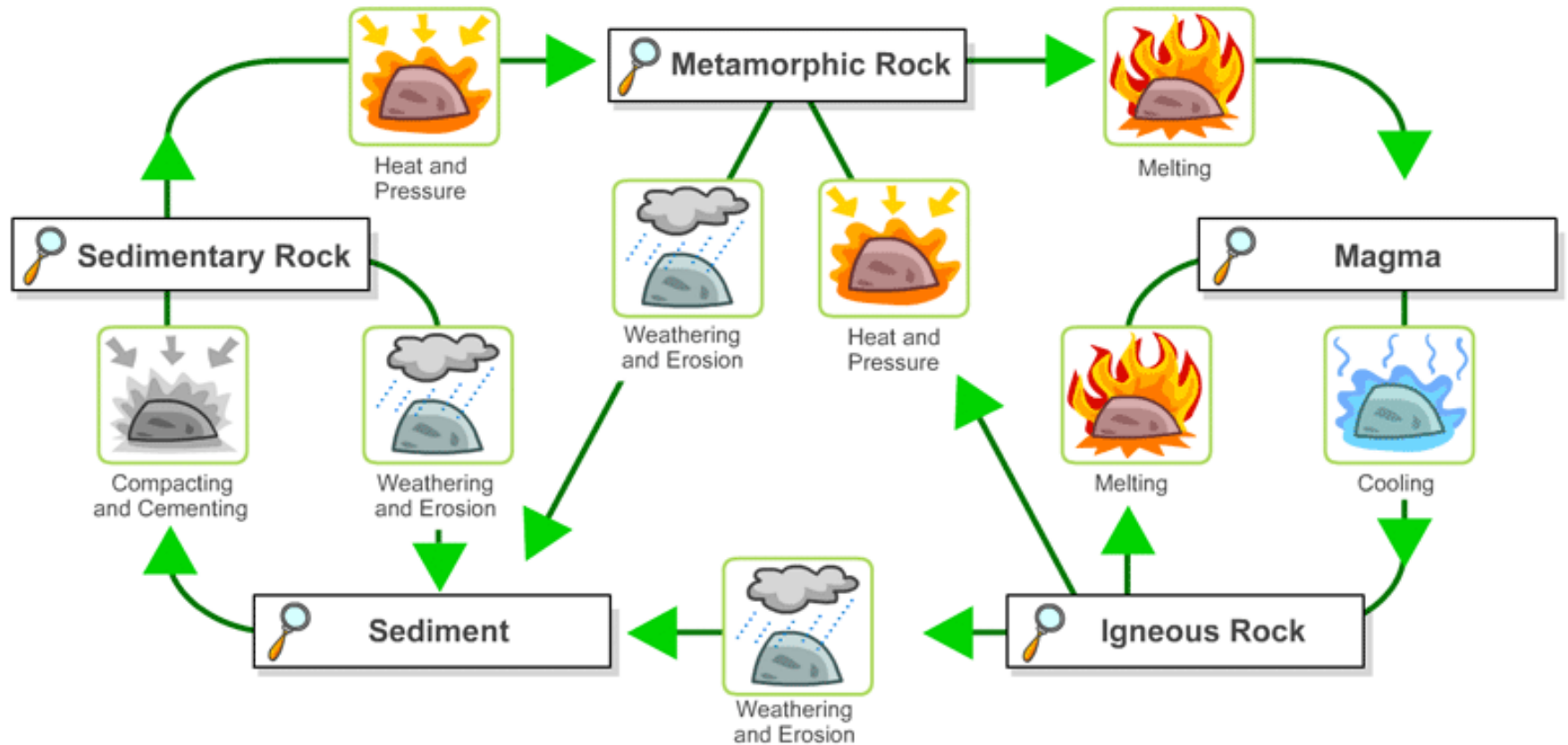
Igneous Rock	Igneous or sedimentary rocks undergo a change when they get pushed downwards. The heat and pressure changes them into new rocks.
Sedimentary Rock	Formed when molten magma or Lava cools slowly. This forms crystals. The crystals are larger if the rock cools more slowly.
Metamorphic Rock	Rocks are worn away into smaller particles by wind, water, wave action, ice and chemicals.
Erosion	Formed when rocks which have been weathered, eroded and deposited on the sea-bed are cemented and compacted to form new rocks.
Weathering	The weathered material is carried by rivers, sea or wind, and deposited.
Deposition	The layers of deposited material gets squashed together forming new rocks.
Compaction and cementation	When the weathered particles of rocks are dumped, often on the sea bed or lakes and rivers forming successive layers.

Match the words with the correct definition

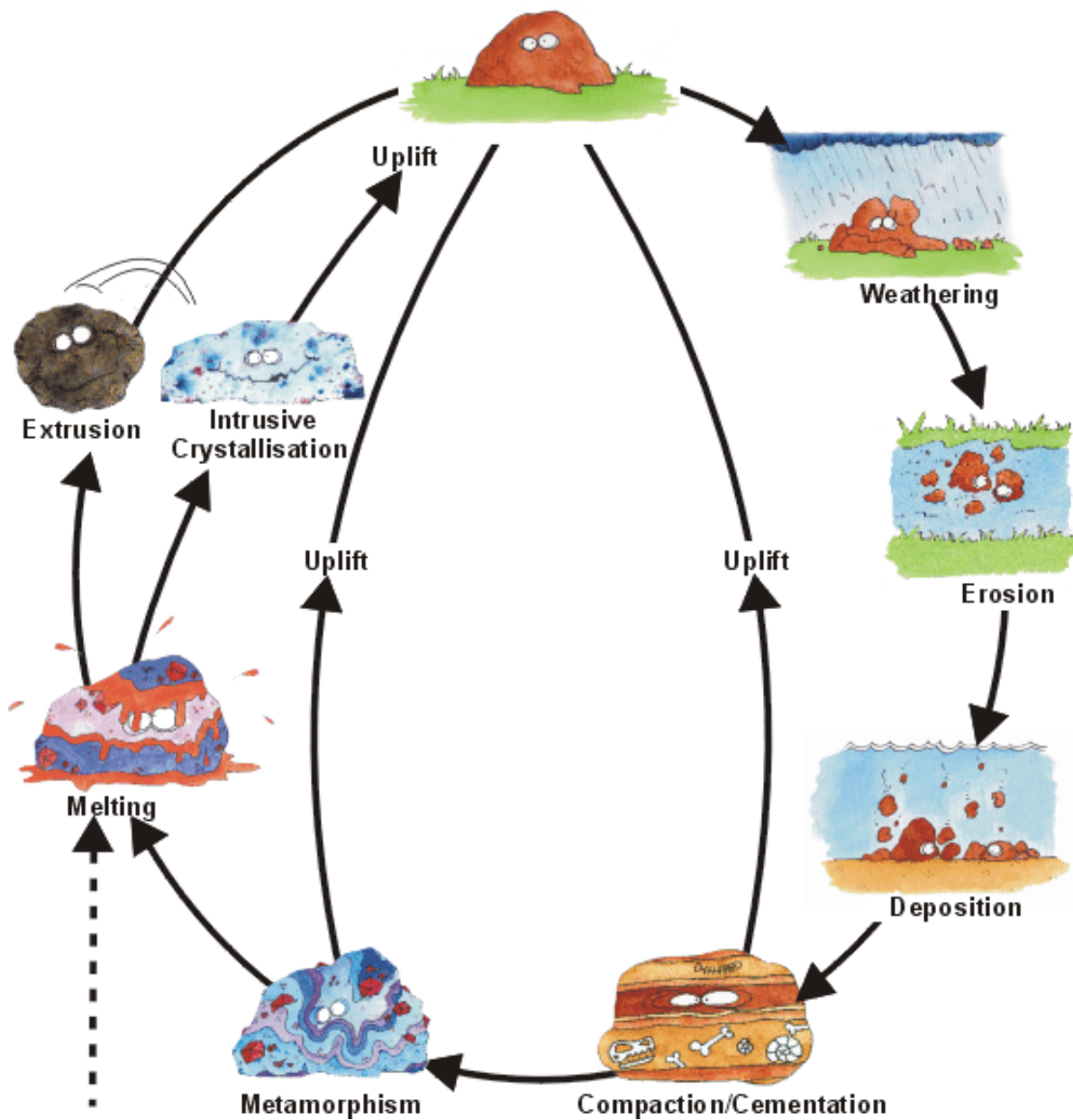
Igneous Rock	Igneous or sedimentary rocks undergo a change when they get pushed downwards. The heat and pressure changes them into new rocks.
Sedimentary Rock	Formed when molten magma or Lava cools slowly. This forms crystals. The crystals are larger if the rock cools more slowly.
Metamorphic Rock	Rocks are worn away into smaller particles by wind, water, wave action, ice and chemicals.
Erosion	Formed when rocks which have been weathered, eroded and deposited on the sea-bed are cemented and compacted to form new rocks.
Weathering	The weathered material is carried by rivers, sea or wind, and deposited.
Deposition	The layers of deposited material gets squashed together forming new rocks.
Compaction and cementation	When the weathered particles of rocks are dumped, often on the sea bed or lakes and rivers forming successive layers.

Rock Cycle

The Rock Cycle



Rocks at the Earth's Surface



A Grade: Analysing the rock cycle

Try and fill in the RED boxes with the correct Rock Type

Igneous

Metamorphic

Sedimentary

Next fill in the WHITE boxes with the correct Forces of Nature that are acting on the Rock Types

Weathering of Rocks at the surface

Deposition of SEDIMENT

Deformation and Metamorphism

Crystallization of MAGMA

Melting

Uplift

Erosion and Transportation

Burial and Compaction

A Grade: Analysing the rock cycle

Lets look at the answers.....

<https://www.youtube.com/watch?v=U7YQ5vwaL98&feature=related>

Rocks, their formation and the rock cycle

How can rocks change from one form to another?

- D: Identify examples of igneous, sedimentary and metamorphic rocks
- C: Describe features of igneous, sedimentary and metamorphic rocks
- B: Explain how different rock types are formed
- A: Analyse how rocks are changed and recycled
- A*: Link how rate of cooling affects igneous rock structure

- Learning check.....
- How has your grade progressed?

Foundation: Consolidation work – reinforcing key words and recall

Higher: Extension work - A*: Link how rate of cooling affects igneous rock structure

Rocks, their formation and the rock cycle

How can rocks change from one form to another?

- D: Identify examples of igneous, sedimentary and metamorphic rocks
- C: Describe features of igneous, sedimentary and metamorphic rocks
- B: Explain how different rock types are formed
- A: Analyse how rocks are changed and recycled
- A*: Link how rate of cooling affects igneous rock structure

- Learning check.....
- How has your grade progressed?