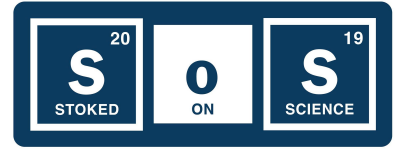


Rock Sorting Challenge (Grade 3+)



For this challenge you'll need to head outside. Go to a local beach, or your backyard or somewhere you know you could find stones or rocks.

What you need:

- Basket/bucket/strong back to collect rocks
- Timer/stopwatch/clock
- Pencil and notepad or this sheet printed off

What to do:

- Collect 15 - 20 rocks. Try to pick ones that look a bit different!
- Find a flat area (grass works really well as the colour of the rocks stands out!)
- Place all your rocks in a pile.
- There are 3 rounds to the challenge. For each round you will sort the rocks into different categories.
- **Round 1:** Set the time for 1 minute or 60 seconds and you have the amount of time to sort the rocks by size. After the time is up write your results in the table below or copy the table into your own workbook. We've given you an example to get you started!
- **Round 2:** Reset the timer for 1 minute and choose your own category to sort your rocks - if you're stuck have a think about what makes the rocks **different**. Start the timer and sort! After you've finished record you answers in the next round in the table.
- **Round 3:** Reset the timer and choose your final category to sort by. Start the timer and sort your rocks! Fill in the last round in the table.

After sorting answer these **questions**:

1) Where did you find your rocks?

.....

2) Did you find it easy or hard to sort them? Why?

.....

3) What do you think sorting the rocks helps tell us about the rocks?

.....

Round	Sorting Category	How many categories/piles did I make?	What were the names of the different categories/piles?
Example	Size	5	Tiny, Very Small, Small, Medium, Large
1	Size		
2			
3			

Rock Hunter Challenge (Grade 5+)

Stoked On Science challenge you to become a rock hunter for the day and do a scientific investigation into the life of your rock.

- Go outside, do you have a favourite hiking or biking trail? Local beach? Or rocks in your back yard?
- Pick one you really like, take it home (be careful that its a size you can carry - ideally the biggest would be the size of your fist!)
- Follow the worksheet below to investigate your rock
- Share your knowledge with your teacher, family or friends! Maybe you could do a short presentation to show off your rock.



Rock Hunter Challenge (Grade 5+)

Sample Location....

(Where did you find your sample? Be as specific as possible, was it attached to a bigger piece of rock? Close to water? On a mountain?)

Do you think your rock travelled far to get here?
How do you know? How do you think it travelled?
And how it break off from the bedrock?



My rock looks and feels like...

(Describe size, colour, pattern, grain size, shape)

Are there crystals in my rock?



I think my rock is....
(circle)

SEDIMENTARY

IGNEOUS

METAMOPRHIC

because...

..... rocks have these characteristics.....

If my rock started as IGNEOUS what has happened in the rock cycle to get it to here? (If it started in the centre of the Earth how did it get to the surface and then to where you found it?)



What is the general age of rocks in the area you found your rock? (Internet research required)

What is a rough estimate for the age of my rock? (Internet research required)

