

40 Weeks of Math Challenges

Week 7



These visual math challenges have been created to intrigue and inspire your children. They are designed to be hands on, open-ended inquiries, to challenge them to think deeply about the world around them.

Each week a new set will be released with four levels.

- Preschool
- Years 1/2 (approx. age 6-8)
- Year 3/4 (approx ages 8-10)
- Year 5/6 (approx. ages 10-12)

I hope you enjoy exploring the ideas with your children! The challenges don't require any special resources, however your children will need a 'Math Journal' to record their discoveries. Any notebook will work, but if you can, try to encourage them to use a Grid book.

You are welcome to freely print these cards for your family but please respect our creative copyright and link back to the original file on our web page to share with others. Thanks, Jo

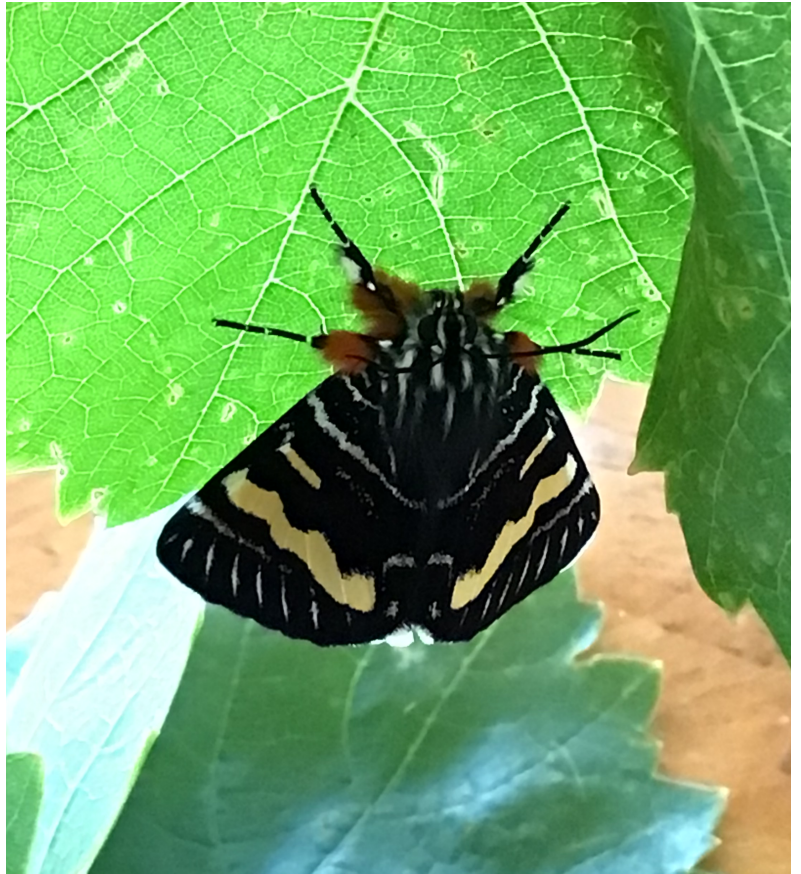
Find me on Instagram @jo_mathinnature and [Nature Study Australia](#)

Patterns

Definition:

Is a repeated arrangement of numbers, shapes and/ colours.

1. Look at the picture, what do you notice?
2. Have a look at some books with picture of butterflies and moths. Do you see their beautiful patterns?
3. Draw a butterfly in your math journal, use colours to make its wings beautiful.



Challenge 7

1/2

Patterns

Definition:

Is a repeated arrangement of numbers, shapes and/ colours.

1. Look at the picture, what do you notice? Do you think that there is a pattern on this Shingle Back Skink?
2. Draw a reptile on grid paper. Use the grid to create a colour pattern.
3. When you go walking take notice of any patterns that you see in the world around you.



Patterns

Definition:

Is a repeated arrangement of numbers, shapes and/ colours.

1. Look at the picture, what do you notice?
2. Can you find tile patterns in your home? In your town?
3. Using coloured card, cut out different shapes. Make your own patterns with the shapes.
4. What do you notice? Do some shapes fit together better than others?
5. Write or draw in your math journal.



Challenge 7

5/6

Patterns

Definition:

Is a repeated arrangement of numbers, shapes and/ colours.

1. Look at the picture, what do you notice?
2. Do you think this is a pattern? Why or why not? Write your reasoning in your math journal.
3. Do you know what causes the ripples in the sand? Next time you are at a beach or lake, take notice of the ripples in the sand.

