3-6: REMOTE MATHS
EDITION 3

ADDITION AND SUBTRACTION USING MONEY

Mathematical language: Coins, dollars, notes, change, add, subtract, altogether.

TASK 1: MONEY NUMBER LINE

Draw a number line and place the total of these amounts along the line.

$5 + $5 + $5	10 x $2 plus 20 cents
5c + 5c + 5c + 5c + 5c+ 5c	$20 + $20 take 50 cents
20c + 20c + 20c + 20c + 20c + 20c + 20c + 20c	$50 + $50 take $1
$10 + $10 + $10 + $10 + $10 + $10	10c + 10 + 10 + $10

Extending prompt: Add in the total of these quantities to your number line.

Half of $2.50	15 less than $5
25 less than $12	Double $26.75
$\frac{3}{4}$ of 2 lots of $4	$\frac{1}{4}$ of $50

TASK 2: SHOPPING

Imagine that you win $50 from a coming first in a drawing competition. Using a toy catalogue (e.g. Target and Big W) how would you spend your $50?

- What would you buy and how much would it cost?
- What change would you have left over?
- **Extending prompt:** What if you were won $100. What could you now buy?

If you do not have paper catalogues delivered to your house, you can shop online using:

www.target.com.au

www.bigw.com.au

TASK 3: TOYS

A Pokémon toy and a tub of Hama beads cost $19.40 altogether. How much could each of the toys cost?

- Can you find at least three possibilities?
- **Extending prompt:** What if three toys were purchased for $19.40, how much could have each of the toys cost? Provide at least three different possibilities .

TASK 4: PIZZA DELIVERY *Adapted from Sullivan 2017*

You have ordered a pizza to be delivered and it costs $27.30. Look at the picture, these are the coins and notes you have in your wallet.

- What money could you give to the pizza seller?
- What change would you expect back if you paid with a $50 note?
- Give two different options for the combination of coins and notes you would get back from $50
- **Extending prompt:** What if you also ordered two more pizzas at the value of $14.25 per pizza as well as the original order. How much change from a $100 note would you get?

TASK 5: SUSHI PLATES

Source MAV https://bit.ly/2V7dwWg

A family eats a meal at a Sushi Train restaurant. The nine orange plates cost $3.80 and the top purple plate is $5.80.

- How much did the family spend?
- Demonstrate your working out two ways.
- **Enabling prompt:** What if the orange plates were $4 and the purple plates were $6?
- What did the family spend now?
- **Extending prompt:** What if the family also had bowls of miso soup at a cost $2.60?
- How much would the final bill be now?
- How much change would the family receive if they paid with a $100 note?

GEOMETRY: DESCRIBING AND CONNECTING 2D AND 3D SHAPES

Mathematical language: Describing shapes: sides, corners, 2D, 3D, edge, straight, curve, angle, convex, concave, congruent, diagonal, symmetrical.

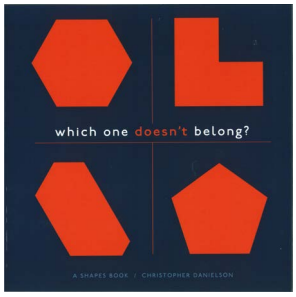
2D shape names: square, rectangle, circle, equilateral triangle, scalene triangle, rhombus, trapezium, pentagon, hexagon, octagon, quadrilateral, semi-circle, decagon, parallelogram.

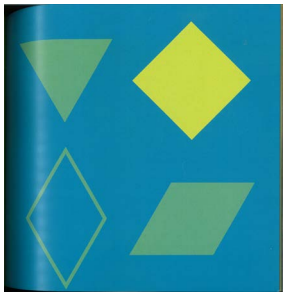
3D shape names: cube, sphere, rectangular prism, pyramid, triangular prism, cone, cylinder.

TASK 1: WHICH ONE DOESN'T BELONG?

Here are some pictures from a great picture story book called *Which One Doesn't Belong?* (Student Book) by Christopher Danielson, published by Hawker Brownlow Education (2016).

- For each picture of 4 images, can you find which one doesn't belong, and why?
- **Extending prompt:** Use as many geometric words as you can in your description (see the mathematical anguage box above for some clues).





TASK 2: CROSSWORD PUZZLE

Create a cross word puzzle and write matching clues for at least 10 words in the language box above.

- You must include these three words in your crossword: congruent, convex, parallelogram.

TASK 3: MAKING SHAPES

By combining 2D shapes we can make more shapes. For example, 2 squares joined together make a rectangle.

Draw and name all the regular shapes that you can make if you have

- 6 congruent equilateral triangles
- 3 congruent rhombuses
- 3 congruent trapeziums

EDITION 3: GEOMETRY(CONT.)

TASK 4: SHADOW HUNTING

I saw a shadow of a 3D shape in the fridge. From one angle the shape had a  shadow.

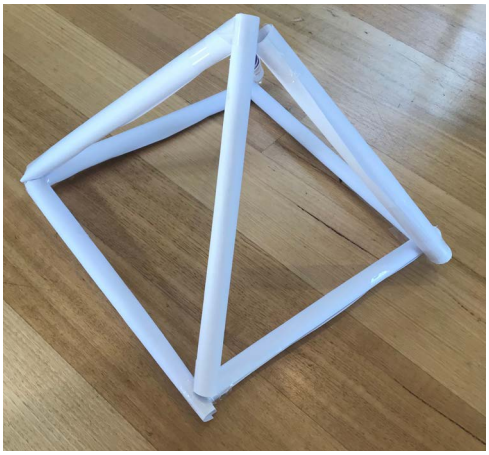
But when the light moved to another side the shadow became a  .

- What 3D shape could I have seen?
- What items in your fridge are this shape?
- Create your own shadow hunt clues for somebody you know.

TASK 5: NEWSPAPER SHAPES

Use old newspapers (or something similar) and sticky tape to create a 3D shapes.

- Toll the paper into long thin cylinders to create rods.
- Use sticky tape to connect the rods together
- Create skeletons of a 3D shape
- Draw your skeleton shape from all aspects or views (front side, top side, left side, right side and even bottom side).



MATHS APP OF THE WEEK: GEOBOARD

Geoboard, by The Maths Learning Centre, is a tool for exploring a variety of mathematical topics introduced in primary school. Learners stretch bands around the pegs to from line segments and polygons and make discoveries about perimeter, area, angles, congruence, fractions and more.

This virtual version of the manipulative is an open-ended education tool that is available on hand held and desktop devices

www.mathlearningcenter.org/resources/apps/geoboard

Cost: Free

Look out for more tasks next week!