

# Properties of shapes

## HERE'S THE MATHS

Your child has been learning the names of 2-D shapes (flat shapes) and to identify right angles in them. 2-D shapes can be **regular**, where the sides and angles are all equal, or **irregular**, where the sides and angles are not all equal. Learning and understanding the vocabulary will aid your child's confidence.

## ACTIVITY

### What to do

- Shuffle the cards and put them in a pile face down.
- Turn over the top card to decide on the 2-D shape and toss the coin to decide whether it is regular or irregular.
- Draw and name the shape e.g. '5 and tails' means drawing an irregular pentagon.
- Repeat with the next card.
- Play for 10 minutes.

### You will need:

- set of 6 cards with 3, 4, 5, 6, 7 and 8 written on them
- coin – heads for regular shape, tails for an irregular shape
- paper and pencil

## QUESTIONS TO ASK

What is a 2-D shape?

Describe a regular hexagon.

The shape I am thinking of has three sides of exactly the same length. What is it called?

Can you draw a pentagon with two right angles?

What do you call a shape with 7 sides? (heptagon)

Can you see a regular 2-D shape? (A square is the most likely.)

- Ask more questions of these types and ask your child to make up questions to ask you.



# Year 3 Maths Newsletter 5



Date: \_\_\_\_\_

Name: \_\_\_\_\_

## MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:

- Number and place value
- Measurement of money
- Properties of shapes

## KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:

- count, read, write, partition (split up) and order 2- and 3-digit numbers, explaining what each digit represents
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- identify and name 2-D shapes with up to 8 sides.

## TIPS FOR GOOD HOMEWORK HABITS

Show your child how you use maths in daily life and involve them in real-life problems, e.g. money calculations when shopping.

# Number and place value

## HERE'S THE MATHS

In order to add, subtract, multiply and divide successfully, your child needs to be able to recognise, count, read, write, compare and order numbers. It is also extremely important that they recognise the place value of each of the digits in a number. For example, in the number 642, the 6 stands for 600, the 4 for 40 and the 2 for 2 ones (units). Your child also needs to be able to partition, or split, numbers into their respective place values, i.e.  $642 = 600 + 40 + 2$ .

## ACTIVITY

### What to do

- You and your child each write five different 3-digit numbers where all the digits are 6 or less.
- The first round is the hundreds round. Roll the dice. If you have a 3-digit number with that number in the hundreds place, you score 10 points. You must cross the number out. If you do not have a 3-digit number with that number in the hundreds place, you must choose one of your numbers to cross out and you score nothing.
- Roll the dice four more times until your numbers have all been used. Declare a winner!
- Repeat, scoring the tens place, and again, scoring the ones place. (You can decide whether to use the same numbers or choose new ones.)

### You will need:

- 1–6 dice
- pencil and paper

## QUESTIONS TO ASK

What is the largest/smallest 3-digit number you can make where the sum of the digits is 6?

What is the largest even/odd 3-digit number that you can make where the sum of the digits is 8?

What is the smallest even/odd 3-digit number that you can make where the sum of the digits is 3?

What is the smallest/largest 3-digit number that is divisible by 5 that you can make where the sum of the digits is 7?

- Ask your child to make up questions of this type to ask you.

# Measurement of money

## HERE'S THE MATHS

In money lessons in Year 3, pounds and pence are kept separate. Amounts are added, subtracted and recorded as either pounds only or pence only. The decimal recording of money is not routinely introduced until Year 4. Secure knowledge of number bonds to 20 and of place value leads to confidence in management of money calculations.

## ACTIVITY

### What to do

- Ask your child to make up prices of less than 75p for each of the toys and write them on the paper slips.
- Take turns to buy two toys, working out the total cost.
- Work out the change that you would have from £2 (200p).

### You will need:

- 6 small toys
- 6 small pieces of paper

### Variations

- Increase or decrease the cost of the toys appropriately.
- Use a selection of coins to buy the toys and to give the correct change.

## QUESTIONS TO ASK

Tell me three different ways to make 10p using 5p, 2p and 1p coins.\*

Tell me three different ways to make 20p using 10p, 5p and 2p coins.\*

Tell me three different ways to make £1 using 20p, 10p and 5p coins.\*

How much change from £1 will I have if I buy a lolly costing 45p? (Make up similar questions of your own.)

I have 35p change from a £1 coin when I bought a bar of chocolate. How much did it cost? (Make up similar questions of your own.)

\*If you have real money, your child can show you using the coins. Handling real money will help your child's understanding.