

## MATHS STORY

Read this news article and answer the questions below.

### HUCK'S ON THE ROOF

An American couple have left a note on their door to assure concerned passers-by that their golden retriever is not stuck on the roof! People walking around a housing block in Austin, Texas, became concerned when they noticed the canine, named Huckleberry, perched on the roof of a home. 'We appreciate your concern, but please do not knock on our door,' the note posted on the front door said. 'He will not jump off unless you entice him with food or a ball.'

Huckleberry learned how to jump onto the roof from the back yard of the house. Owner Allie says he goes up to keep watch over the neighbourhood. Instead, Huck has found that a lot more people have their eyes on him. Images posted by local Twitter users show Huck in various poses atop the one storey home. Allie has also set up an Instagram account showcasing the dapper dog on the roof and off it.

### Maths Questions

1. Texas is the second largest state in the USA with an area of 695,662km<sup>2</sup>. Alaska has an area of 1,717,856km<sup>2</sup>. What is the difference in area between the two states?
2. The population of Texas is 29,472,295. How many more people live in Texas than in Alaska if the Alaskan population is 734,002?
3. It takes 6 hours 54 minutes to fly from Texas to Alaska. If Allie's flight took off at 10.37 a.m. what time was it when it landed?
4. Allie's back yard is 12m long and 9m wide. It cost €140 per metre to erect a wooden fence all around it. How much did the fence cost?
5. It cost €8 to paint 1m<sup>2</sup> of the fence. How much did it cost to paint the entire fence?
6. Allie has a rectangular swimming pool with an area of 35m<sup>2</sup> in her back yard. The pool is 7m long. How wide is it?

7. Huckleberry is 0.87m tall. He jumps four times his own height to get onto the roof. How high is the roof?

8. Allie buys a 5kg bag of dog food for Huck which he eats in 8 days. How much does he eat each day?

Maths Mastery Decimal Place Value

Pavel writes a number of decimal fractions.

Circle all the decimal fractions with 5 in the tenths place.

Explain how you know the numbers you have circled have 5 in the tenths place.

0.548

0.458

0.295

0.572

0.451

0.045

0.519

0.53

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Maths Mastery Decimal Place Value

Nikita writes a number of decimal fractions.

Circle all the decimal fractions with 2 in the thousandths place.

Explain how you know the numbers you have circled have 2 in the thousandths place.

0.623

0.812

0.239

0.421

0.266

0.832

0.275

0.329

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Maths Mastery Decimal Place Value

George describes a number. "The number is between 1 and 2. There is a 5 in the tenths place, 8 in the hundredths place and a 1 in the thousandths place."

What is George's number?

With a partner, describe numbers to each other.



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Maths Mastery Decimal Place Value

Pavel says, "When you multiply a decimal number by 10, the decimal point is moved one place to the left."

$$4.56 \times 10 =$$

Work alone or with a partner to improve Pavel's explanation.



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# Maths Mastery

## Solve Problems Challenge Cards



### Maths Mastery: Solve Problems

1. Baked beans are sold individually (75c), in packs of 4 (\$2.69) and packs of 6 (\$3.85). What is the cheapest way to buy 12 tins of baked beans?

The 4-pack is on offer at \$2.

How much can be saved in buying 12 tins in packs of 4?

With the offer price, how much is saved per tin buying a 4-pack rather than 4 individual tins?

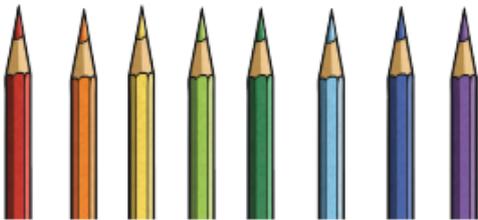


### Maths Mastery: Solve Problems

2. A large box of pencils costs \$360. In each box there are 100 packets of pencils, each with 12 pencils.

How much does each pencil cost?

What cost would be found by calculating  $\$360 \div 12$ ?



### Maths Mastery: Solve Problems

3. Write the missing numbers.

$$90 + \square = 4.5$$

$$\square \times 30 = 1050$$

$$\square + 630 = 1600$$

$$243 - \square = 160$$

$$\square + 40 = 40$$

$$\square \times 100 = 2800$$

$$19\,800 + \square = 23\,200$$

$$17 - \square = -18$$