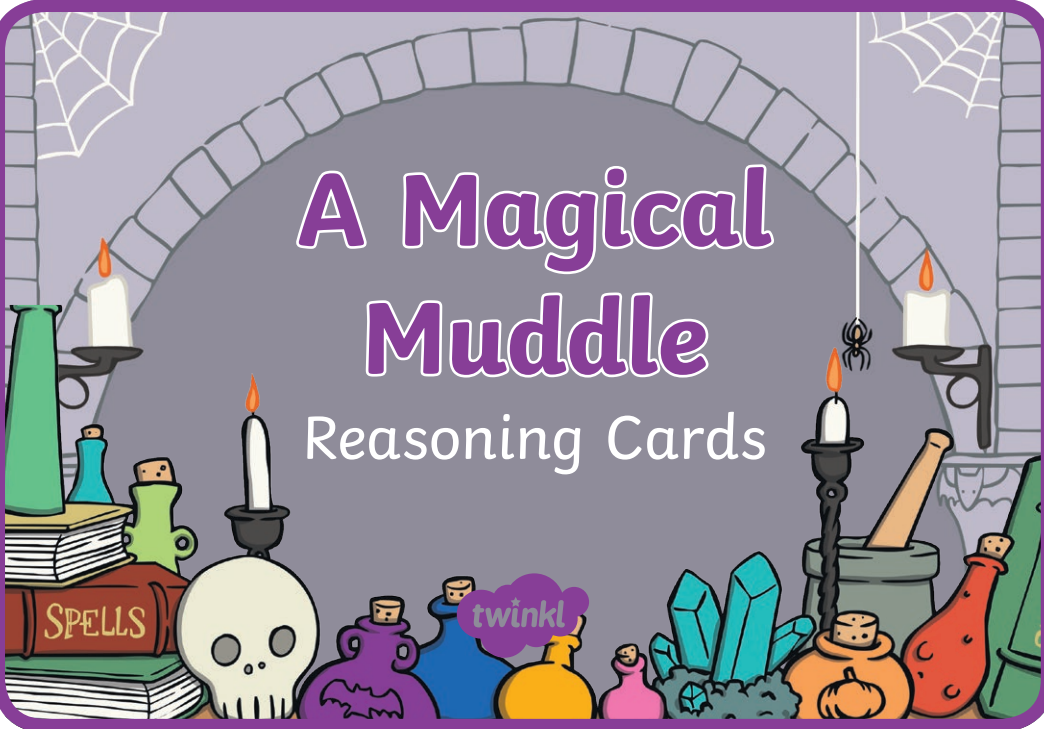


A Magical Muddle Reasoning Cards



A Magical Muddle Reasoning Cards



- 1 Tabitha counts her books in 5s, starting from 0.



Will she say the number 24?
Explain your thinking.

A Magical Muddle Reasoning Cards



- 2 There are 22 bugs in a potion.
6 of them are worms. 8 of them are spiders.
The rest are ants.
There are less worms than ants in the potion.



Is this correct? How do you know?

A Magical Muddle Reasoning Cards



- 3 5 spiders catch 20 flies altogether.
They each catch an equal number of flies.

Which answer shows how many flies each spider catches?

- a) 6
- b) 4
- c) 5

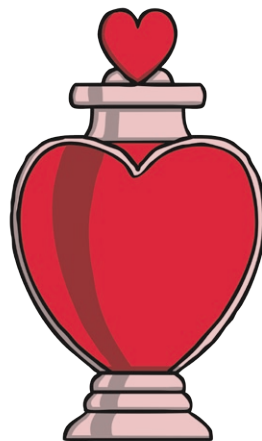
How do you know?





- 4 Agnes adds 3 spiders to the red potion, 4 spiders to the blue potion, and 6 spiders to the green potion.

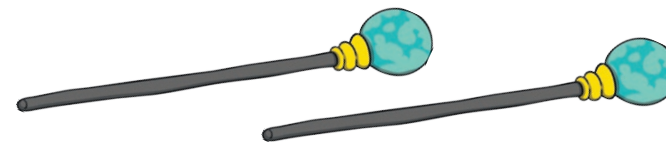
Agnes uses more than 15 spiders altogether.



Is this correct? Explain your reasoning.



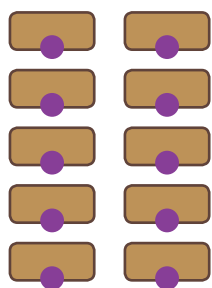
- 5 Wands come in packs of two.
Mrs Brewer buys 8 packs.
There are 15 witches in her class.



Does she have enough wands for each of them? Does she have any wands left over? Explain your reasoning



- 6 Desks are arranged in the classroom like this:



This can be shown as two calculations. Can you complete the missing numbers?

$$2 \times \square$$

$$5 \times \square$$

Can you explain your thinking?
How many witches can sit down?



- 7 There are 5 potions.
Each potion needs the same number of spiders in it.
In total, Mimi uses 35 spiders.



Is there an odd or even number of spiders in each potion? How do you know?

8

Beatrix finds 4 twigs. Each twig has 10 leaves on it.

She needs to use 38 leaves in her potion.



Are there enough leaves on the 4 twigs for Beatrix's potion? How do you know?

9

It takes Tabitha an hour to fly 2 miles on her broomstick.

It takes the Head Witch 60 minutes to fly 2 miles.

Tabitha says it takes her longer to fly 2 miles.



Is she correct? How do you know?

10

There are 40 witches in the classroom.

10 witches are making potions.

A quarter of the witches are casting spells.

There are more witches casting spells than making potions.



Is this correct?
How do you know?

11

A spellbook weighs 5g.

20 spellbooks weigh less than 100g.

Is this correct?
How do you know?





12

This table shows the number of ingredients needed for a 'rainbow hair' potion.

Spider legs	16
Rat tails	25
Unicorn hairs	50
Snail shells	8

Are these statements true or false?

- There are double the number of spider legs than snail shells.
- The total number of rat tails and unicorn hairs is more than 100.
- The difference between the number of rat tails and spider legs is 9.

Answers

- No, because 24 isn't a multiple of 5.
- Yes, there are 8 ants, and 6 is less than 8.
- b) 4
- No, Agnes uses 13 spiders: $4 + 6 + 3 = 13$.
- Yes, Miss Brewer has enough, with 1 left over: $2 \times 8 = 16$.
- 2×5 and 5×2 . 10 witches can sit down.
- There are 7 spiders in each potion, which is an odd number.
- Yes, there are enough leaves. $4 \times 10 = 40$.
- No, it takes them both the same amount of time.
- No, there is an equal number of witches casting spells and making potions. $\frac{1}{4}$ of 40 is 10.
- No, they weigh exactly 100g.
- a) True
b) False
c) True