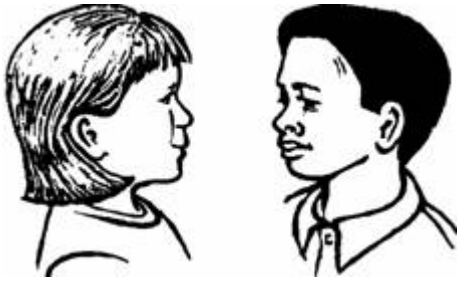
1. Millie and Ryan play a number game.

What's my number?



Is it under 20? Yes

Is it a multiple of 3? Yes

Is it a multiple of 5? Yes

What is the number?

1 mark

They play the game again.

Is it under 20? No

Is it under 25? Yes

Is it odd? Yes

Is it a prime number? Yes

What is the number?

1 mark

2. 5^2 =

1 mark

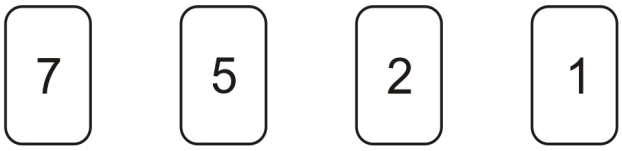
3. A number **multiplied by itself** gives the answer **49.**

Circle the number.

2 3 4 5 6 7 8 9

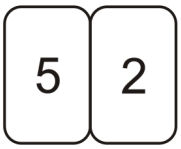
1 mark

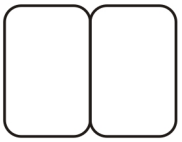
4. Here are four digit cards.

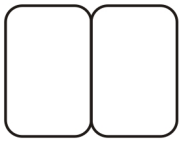


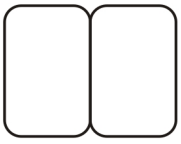
Choose two cards each time to make the following two-digit numbers.

The first one is done for you.

an even number 

a multiple of 9 

a square number 

a factor of 96 

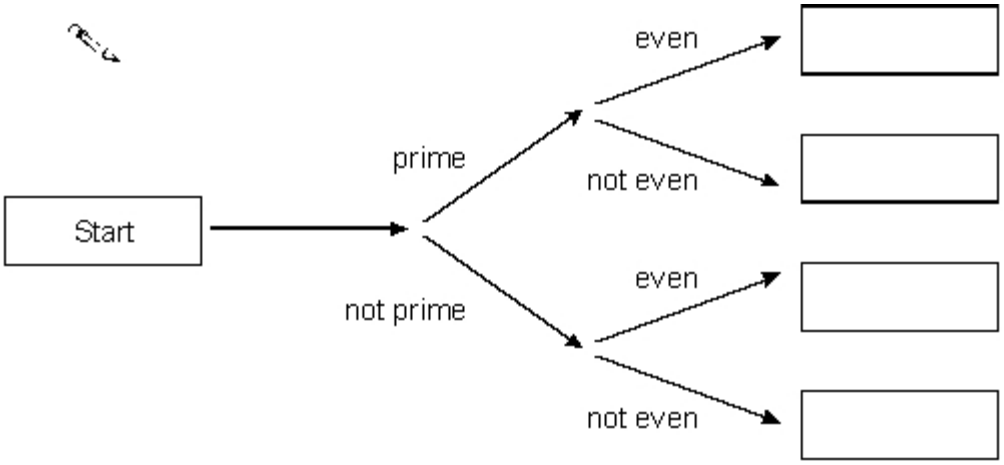
2 marks

5. Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.

You may not need to use all of the boxes.

9 **17** **20**



2 marks

6. 3^3 =

1 mark

7. Here is a sorting diagram for numbers.

Write a number **less than 100** in each space.

	even	**not** even
a square number		
not a square number		

2 marks

8. 11^2 =

1 mark

9. 4^3 =

1 mark

10. Circle the **two** prime numbers.

29 39 49 59 69

1 mark

Mark schemes

1. (a) 15

1

(b) 23

1

[2]

2. 25

[1]

3. 2 3 4 5 6 (7) 8 9

[1]

4. Award **TWO** marks for all three numbers correct as shown:

- a multiple of 9 | 2 | 7 | **OR** | 7 | 2 |
- a square number | 2 | 5 |
- a factor of 96 | 1 | 2 |

If the answer is incorrect, award **ONE** mark for two numbers correct.

Up to 2

[2]

5. Award **TWO** marks for numbers placed in boxes as shown below:

17
20
9

If the answer is incorrect, award **ONE** mark for two numbers correctly placed.

Do not *accept a number repeated in different boxes.*

Ignore any numbers on the diagram other than those given.

Up to 2

[2]

6. 27

[1]

7. Award **TWO** marks for a correct number written in each of the four boxes.

	even	not even
a square number	0 **OR** 4 **OR** 16 **OR** 36 **OR** 64	1 **OR** 9 **OR** 25 **OR** 49 **OR** 81
not a square number	even **AND** not a square **AND** less than 100	odd **AND** not square **AND** less than 100

If the answer is incorrect, award **ONE** mark for three boxes completed correctly.

Accept more than one number in each box, provided all are correct.

Up to 2

[2]

8. 121

[1]

9. 64

[1]

10. Two numbers circled as shown:

29 39 49 59 69

Do not *award the mark if additional incorrect numbers are circled.*

Accept alternative unambiguous indications, eg numbers ticked, crossed or underlined.

[1]