**Year 6 maths quiz: memory mastermind!**

**Multiplication and division vocabulary**

1. List all the **factors** of 36: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. List all the **common factors** of 24 and 32: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. List all the **prime numbers** under 20: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What’s a **composite number**? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What are the **prime factors** of 12? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. List the first 6 **multiples** of 9: \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_ and \_\_\_\_
7. What is the **lowest common multiple** of 4 and 6? \_\_\_\_\_
8. List 3 different **square numbers**: \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
9. What is 33? \_\_\_\_

**Angles**

Complete the grid.

|  |  |
| --- | --- |
| **How many degrees…** |  |
| in a full turn? | ° |
| in a half turn? | ° |
| in a right angle? | ° |
| in an acute angle? | ° |
| in an obtuse angle? | ° |
| in a reflex angle? | ° |
| on a straight line? | ° |
| inside a triangle? | ° |
| inside a quadrilateral? | ° |

**Fractions, decimals & percentages**

Complete the conversion grid.

|  |  |  |  |
| --- | --- | --- | --- |
| **Fraction** | **Decimal** | **Percentage** | **Operation** |
| ½ |  |  |  |
|  | 0.2 |  |  |
|  |  | 1% |  |
|  |  |  | ÷ 10 |
| ¾ |  |  | ÷ 4, x3 |
|  | 0.25 |  |  |
|  |  | 5% |  |

**Shape vocabulary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Draw a **horizontal** line. | Draw a **vertical** line. | Draw a pair of **parallel** lines. | Draw a pair of **perpendicular** lines. | Label this circle with its **circumference, radius** and **diameter.** |
|  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 = | I | = | X | 100 = |  | 1000 = |  |
| = | V | 50 = |  | = | D |  |  |

**Roman numerals**Complete the grid.

**2D shapes**

What is a **polygon**? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What’s the difference between a **regular** an **irregular** polygon? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

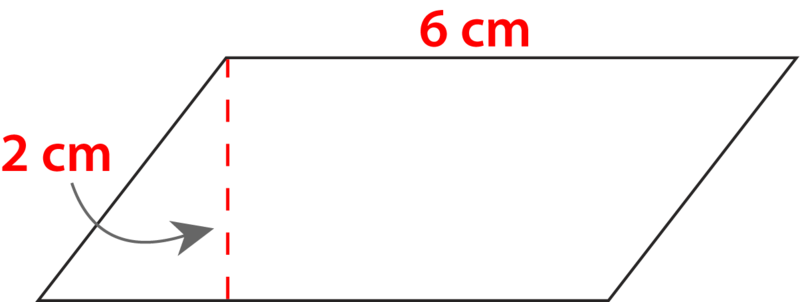
What is the area of this triangle?

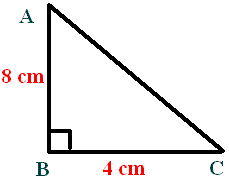
Area = \_\_\_\_\_\_\_\_\_\_\_

What is the area of this parallelogram?

Area = \_\_\_\_\_\_\_\_\_\_\_

Complete the grid.





|  |  |
| --- | --- |
| **Name** | **No. of sides** |
| octagon |  |
|  | 5 |
| nonagon |  |
|  | 7 |
| quadrilateral |  |
|  | 10 |
| hexagon |  |

Below each shape, write its name (don’t just write ‘triangle’ for the first 3 – be specific!)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Measurement conversions**

1. List all the months that have exactly 31 days: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. List all the months that have exactly 30 days: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What’s different about a leap year? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Complete the conversions.

|  |  |  |
| --- | --- | --- |
| 1cm = mm | 1km = m | 1 litre = ml |
| 1m = cm | 1 mile = km | 1 kilogram = g |

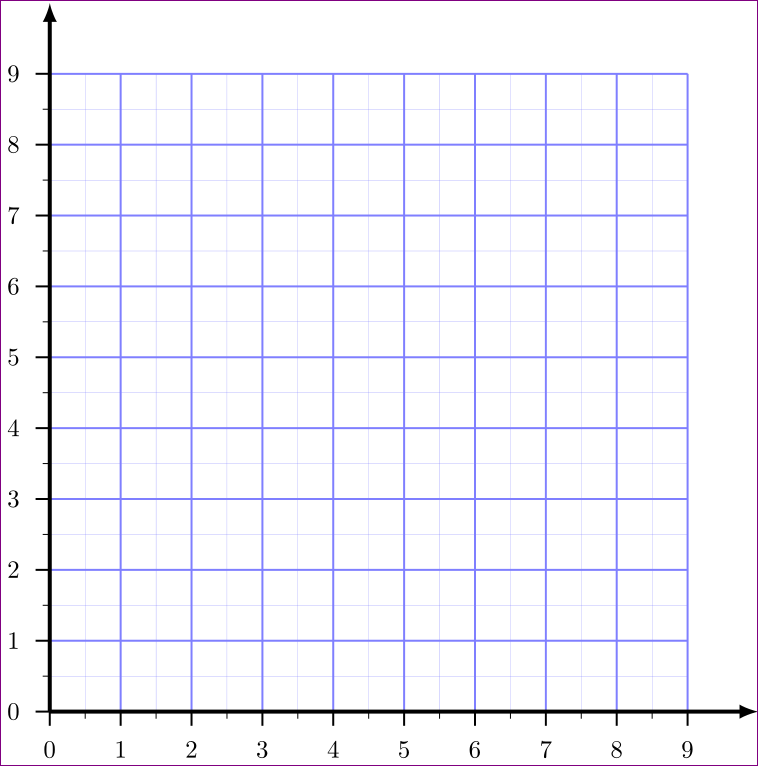
**Co-ordinates** Write an **X** on the co-ordinate (3,5).

**The mean**

What is the mean of the following numbers?

5, 7, 2, 8, 3

Mean = \_\_\_\_\_\_\_\_\_\_\_\_



**3D shapes**

|  |  |  |  |
| --- | --- | --- | --- |
| Complete the grid. |  |  |  |
| What is this shape called? |  |  |  |
| How many **faces** does it have? |  |  |  |
| How many **edges** does it have? |  |  |  |
| How many **vertices** does it have? |  |  |  |

What’s the volume of this cuboid? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

