

Maths - Week Starting 11th May – 8.3A and 8.3B

Lesson 1

Go on to MyMaths and find the task called “Scale Drawings”.

Click on “Lesson”.

In section 1 use the arrow to change the scale – look at how the actual length is calculated.

Work through sections 2, 3 and 4 carefully, answering questions.

In section 5 remember $\text{area} = \text{length} \times \text{width}$. Then multiply area $\times 9$ to find the cost.

In section 6 try drawing this using the scale 1cm to 25cm. (100cm = 1m)

Fit the furniture into the room.

Finally do all of the task and aim for 80%, you can use a calculator.

Lesson 2

I want you to practice some ratio and proportion questions.

On the next page is a worksheet called “Defuse the Bomb”.

You need to answer all the questions in your books.

Then use your answers and the code to determine the order in which the coloured wires have to be cut. If your answer to question 1 is 2:5 then you would cut the red wire first.

Write out the colours in order.

Lesson 3

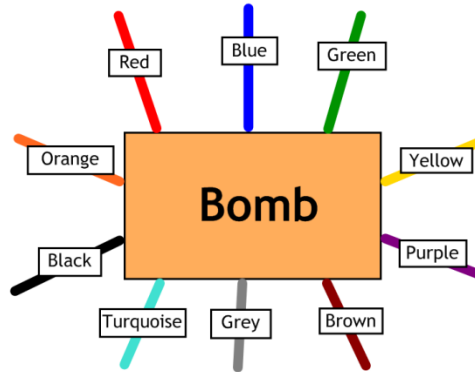
The second worksheet is similar, work out all the answers, then put colours in correct order.

No explosions please.

I will send you answers later in the week.

Defuse the Bomb –Basic Ratio and Proportion

The Mathematician, a notorious terrorist has planted a bomb. You must defuse that bomb using the mathematical clues he's left.



Answer the questions, then cut the coloured wires in the order that the answers appear, using the table below:

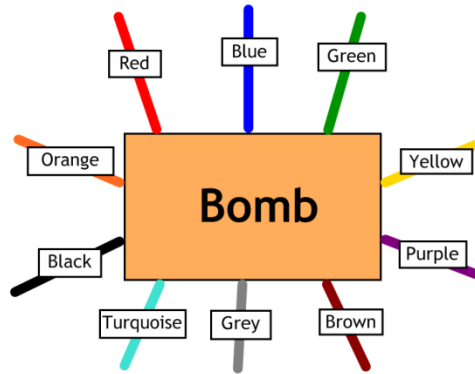
| | | | | | | | | | |
|-----|------|-------|--------|--------|-------|------|-----------|-------|--------|
| Red | Blue | Green | Yellow | Purple | Brown | Grey | Turquoise | Black | Orange |
| 2:5 | 18 | 2:3 | 28 | 35 | 2:1 | 20 | 5:6 | 30 | 4:3 |

Here are the clues that show which order to cut the wires:

| | |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | In a class there are 10 boys and 15 girls. Write the ratio of boys to girls in its simplest form. |
| 2 | The ratio of black beads to white beads on a necklace is 3:1. If there are 6 white beads on my necklace, how many black beads are there? |
| 3 | Debbie has 24 ten pence pieces and 12 five pence pieces in her piggy bank. What is the ratio of 10p to 5p pieces in its simplest form? |
| 4 | The ratio of adults to children on a picnic is 2:7. If there are 10 adults on the picnic, how many children are there? |
| 5 | A recipe that makes enough cake for 8 people requires 200g of flour. How many people will a cake containing 700g of flour feed? |
| 6 | A football team won 8 games and lost 6 games in a season. What is the ratio of games won to games lost in its simplest form? |
| 7 | Adam is 9 years old and Billy is 11 years old. What will be the ratio of Adams' age to Billy's age in exactly one year's time? Give your answer in its simplest form. |
| 8 | It takes 4 workers 10 days to lay the foundations for a house. How long would it take 2 workers? |

Defuse the Bomb – Ratio and Proportion

The Mathematician, a notorious terrorist has planted a bomb. You must defuse that bomb using the mathematical clues he's left.



Answer the questions, then cut the coloured wires in the order that the answers appear, using the table below:

| Red | Blue | Green | Yellow | Purple | Brown | Grey | Turquoise | Black | Orange |
|-----|------|-------|--------|--------|-------|------|-----------|-------|--------|
| 48 | 210 | 12 | 28 | 245 | 49 | 84 | 45 | 225 | 96 |

Here are the clues that show which order to cut the wires:

| | |
|---|------------------------------------------------------------------------------------------------------------------------|
| 1 | Three pens cost £1.05. How much would seven pens cost in pence? |
| 2 | The ratio of girls to boys in a class is 3:2. If there are 18 girls, how many boys are there? |
| 3 | Alice and Brian share 63 sweets in the ratio 5:4. How many sweets does Brian get? |
| 4 | The ratio of Michael and Neil's ages is 7:6. If Neil is really 42 years old, how old is Michael? |
| 5 | Benny, Jenny and Lenny win some £750 in a competition. The prize is shared in the ratio 2:3:5. How much did Jenny win? |
| 6 | Twelve books cost £51.60. How many books would I get for £193.50? |
| 7 | The ratio of boys to girls in a club is 4:3. If there are 48 boys, how many members of the club are there? |
| 8 | The ratio of the angles of a triangle is 3:8:4. What is the size of the largest angle? |