

Week 2

This week in a nutshell:

As well as some fact based skills (units, number types), there are calculation and reasoning skills to work on this week.

Question 1: Metric units

Question 2: Standard form

Question 3: Types of number

Question 4: Comparing data using graphs

Question 5: Reflections

Students may need reminders of metric units and their uses, and may also need prompting on what is meant by types of number; these could be covered prior to completing the questions. Your cohort may need extra time for questions on comparing graphs or reflections depending on their visual abstraction skills.

This week's ideas for class discussion include:

Question 1: **Metric units**

- What do you think are the advantages of the metric system?

Question 2: **Standard form**

- Why might standard form also be known as “scientific notation”?
- Can you give examples of where standard form is used?

Question 3: **Type of a number**

- Are there actually different types of number, or is it our representation that changes?

Question 4: **Comparing data using graphs**

- Is it easier to compare data in numeric, tabular or visual format? Why?

Question 5: **Reflections**

- Reflections occur frequently in nature. How are these similar/different to the reflections we perform in maths?

Week 2: Day 1

1) $1\text{kg} = \underline{\hspace{1cm}} \text{g}$

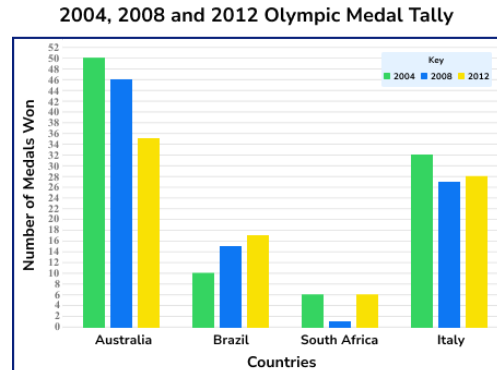
2) Write as an ordinary number:

a) 5×10^3

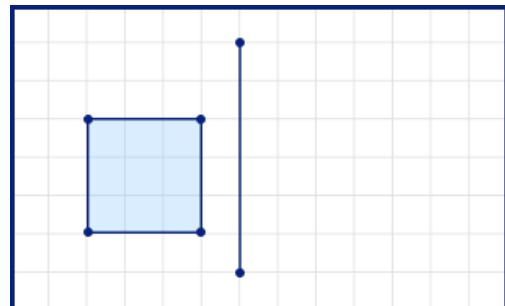
b) 8×10^{-1}

3) $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{3}$ are examples of what type of number?

4) Which country won an increasing number of medals at successive olympics?



5) Reflect the object across the given line.



Week 2: Day 1 Answers

1) $1\text{kg} = 1000\text{ g}$

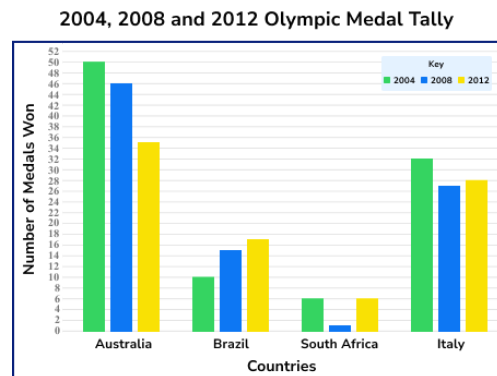
2) Write as an ordinary number:

a) 5×10^3
500

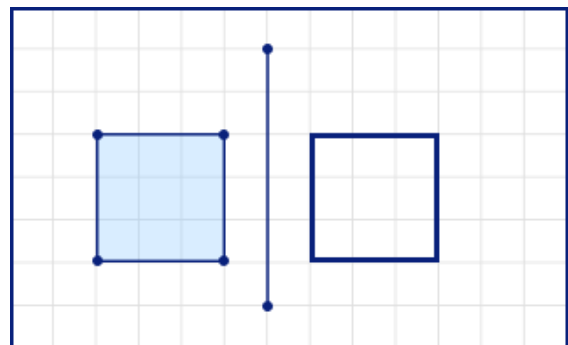
b) 8×10^{-1}
0.8

3) $\frac{1}{2}, \frac{3}{4}, \frac{2}{3}$ are examples of what type of number?
Fraction (rational numbers)

4) Which country won an increasing number of medals at successive olympics?
Brazil



5) Reflect the object across the given line.



Week 2: Day 2

1) $1.75 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

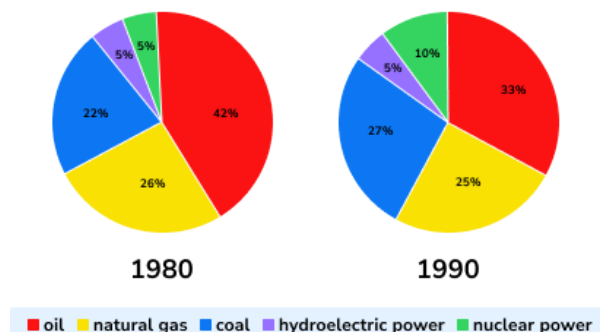
2) Write as an ordinary number:

a) 4.2×10^4

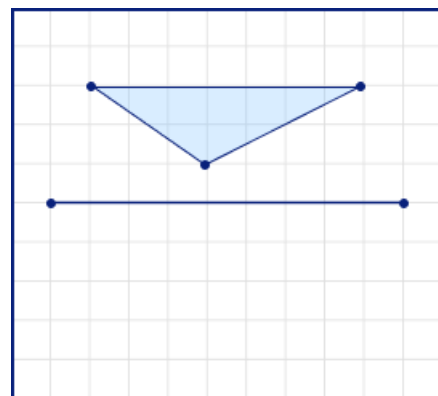
b) 1.3×10^{-3}

3) -3 , -7.23 , -0.001 are examples of what type of number?

4) Which power source had the same proportion of usage in 1980 and 1990?



5) Reflect the object across the given line.



Week 2: Day 2 Answers

1) $1.75 \text{ m} = 175 \text{ cm}$

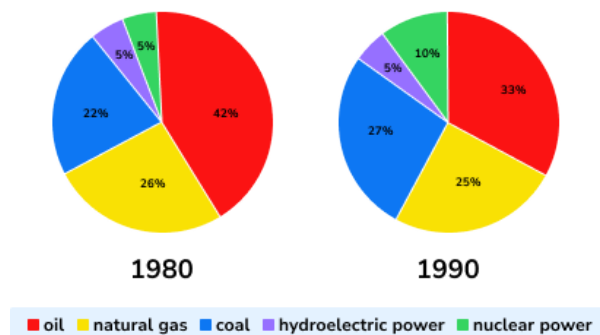
2) Write as an ordinary number:

a) 4.2×10^4
42000

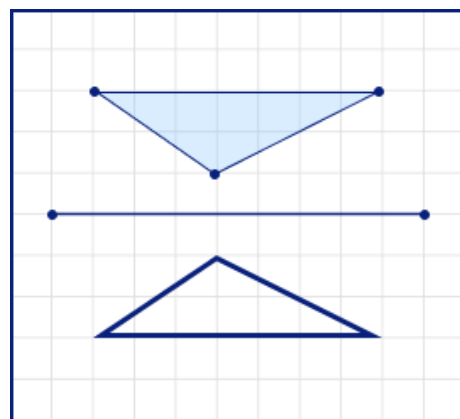
b) 1.3×10^{-3}
0.0013

3) -3, -7.23, -0.001 are examples of what type of number?
Negative numbers

4) Which power source had the same proportion of usage in 1980 and 1990?
Hydroelectric



5) Reflect the object across the given line.



Week 2: Day 3

1) $25.4 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

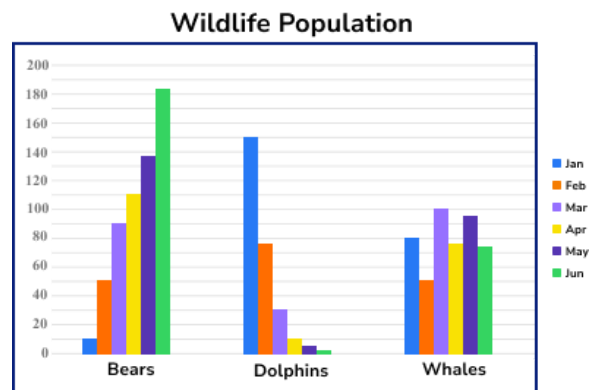
2) Write in standard form:

a) 600

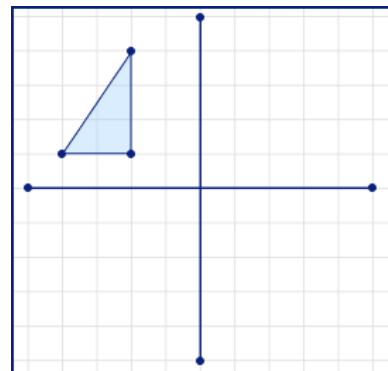
b) 0.07

3) 2, 3, 7, 13, 29, are examples of what type of number?

4) Which animal had the most sightings in March?



5) Reflect the triangle in the y -axis, then the x -axis.



Week 2: Day 3 Answers

1) $25.4 \text{ km} = 25400 \text{ m}$

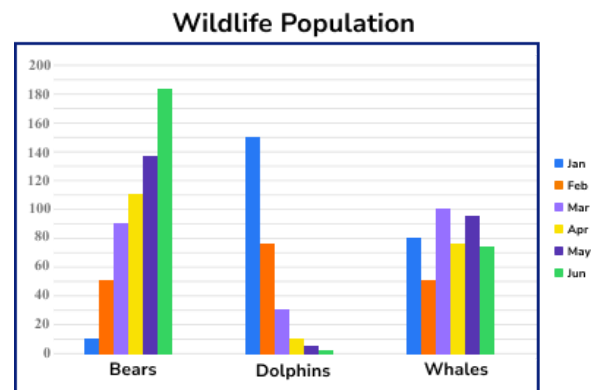
2) Write in standard form:

a) 600
 6×10^2

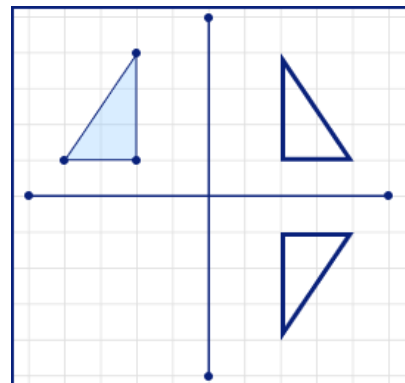
b) 0.07
 7×10^{-2}

3) 2, 3, 7, 13, 29, are examples of what type of number?
Prime numbers

4) Which animal had the most sightings in March?
Whales



5) Reflect the triangle in the y -axis, then the x -axis.



Week 2: Day 4

1) $0.05 \text{ kg} = \underline{\hspace{1cm}} \text{ g}$

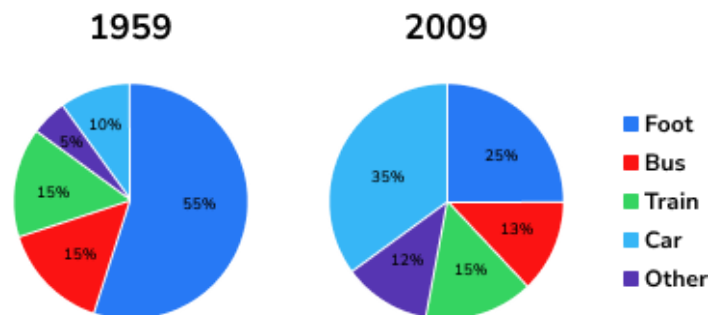
2) Write in standard form:

a) 0.027

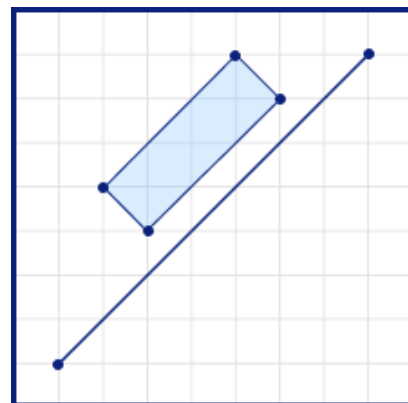
b) 9.99

3) 32, 14, 20, 66 are examples of what type of number?

4) How has car usage changed as a method of transport for getting to school?



5) Reflect the object across the given line.



Week 2: Day 4 Answers

1) $0.05 \text{ kg} = 50 \text{ g}$

2) Write in standard form:

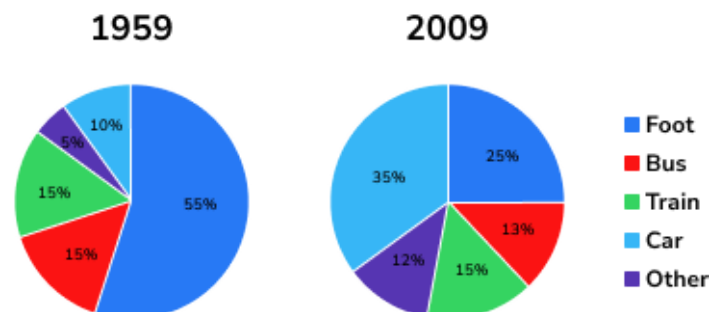
a) 0.027
 2.7×10^{-2}

b) 9.99
 9.99×10^0

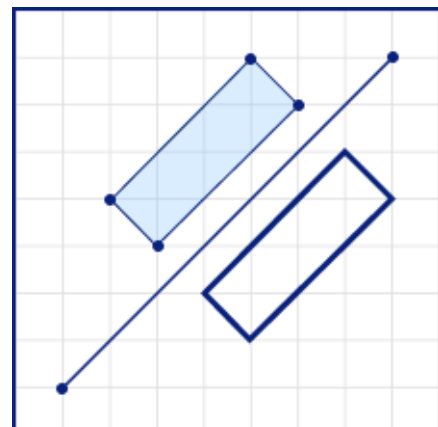
3) 32, 14, 20, 66 are examples of what type of number?
Even numbers

4) How has car usage changed as a method of transport for getting to school?

The proportion using a car has increased.



5) Reflect the object across the given line.



Week 2: Day 5

1) ___ L = 660 mL

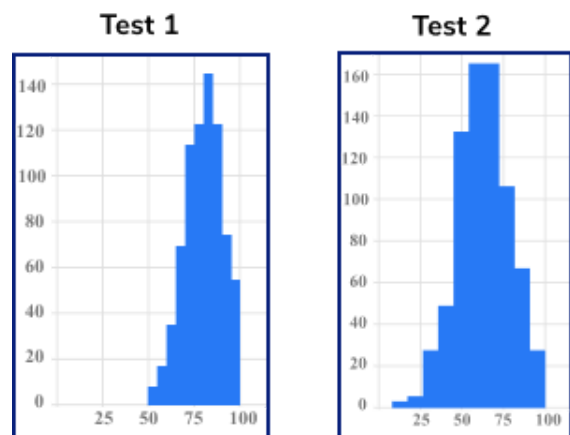
2) Write in standard form:

a) 0.000103

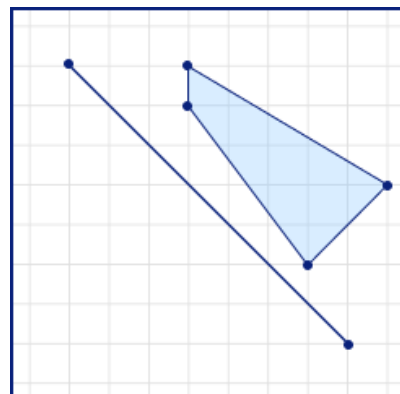
b) 393,300,000

3) $\sqrt{2}$, $\sqrt[3]{7}$, $3\sqrt{5}$ are examples of what type of number?

4) In which test did students have the more consistent results?



5) Reflect the object across the given line.



Week 2: Day 5 Answers

1) $0.66 \text{ L} = 660 \text{ mL}$

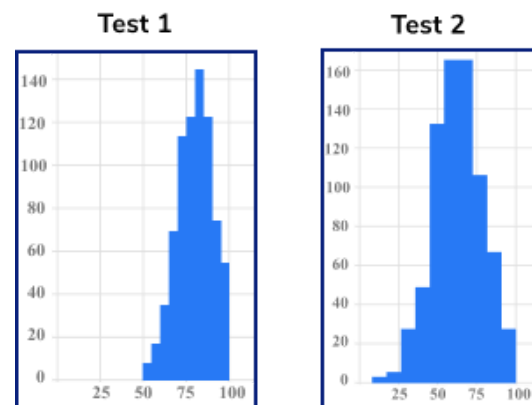
2) Write in standard form:

a) 0.000103
 1.03×10^{-4}

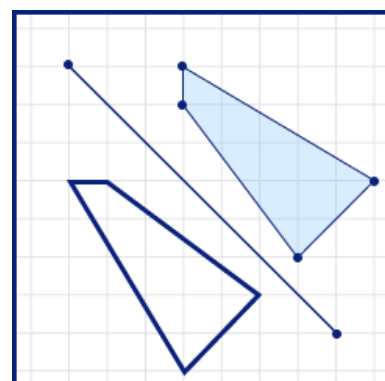
b) $393,300,000$
 3.933×10^8

3) $\sqrt{2}$, $\sqrt[3]{7}$, $3\sqrt{5}$ are examples of what type of number?
Surd (irrational numbers)

4) In which test did students have the more consistent results?
Test 1



5) Reflect the object across the given line.



Do you have KS4 students who need additional support in maths?

Our specialist tutors will help them develop the skills they need to succeed at GCSE in weekly one to one online revision lessons. Trusted by secondary schools across the UK. Visit thirdspacelearning.com to find out more.