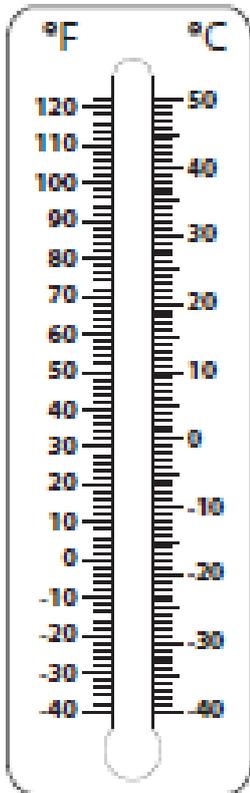


Negative Numbers (Day 1) – Lesson 1

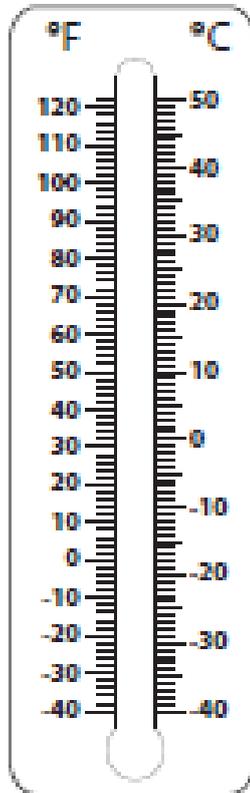
When shading the thermometers below, ensure you take the time to understand the scale. Sometimes you need to measure the temperature in degrees Celsius (right hand scale) or sometimes it will need to be measured in Fahrenheit (left hand scale)

Shade each thermometer to indicate the specified temperature.

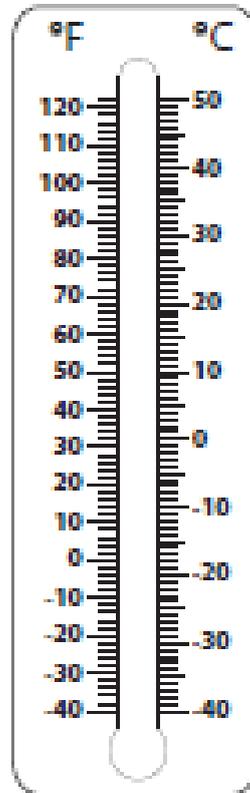
1) -4°C



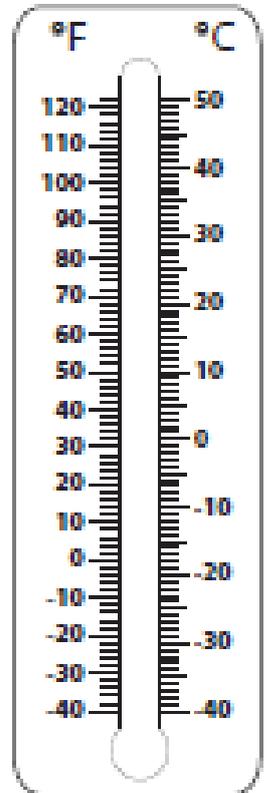
2) 90°F



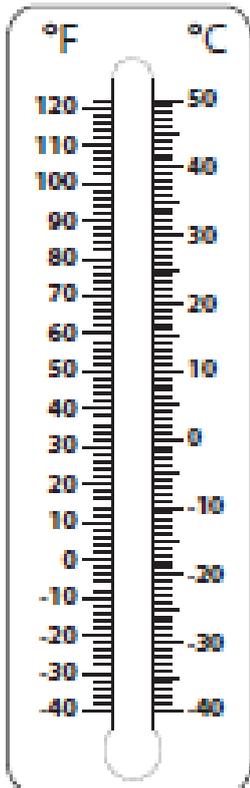
3) 48°C



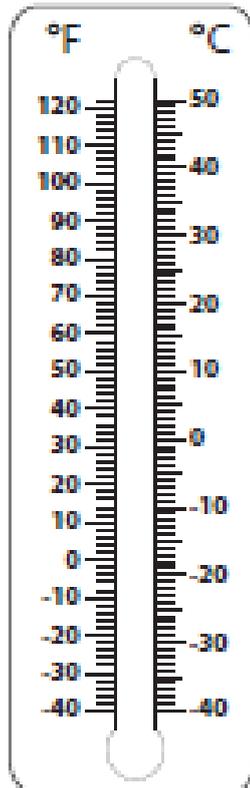
4) -15°F



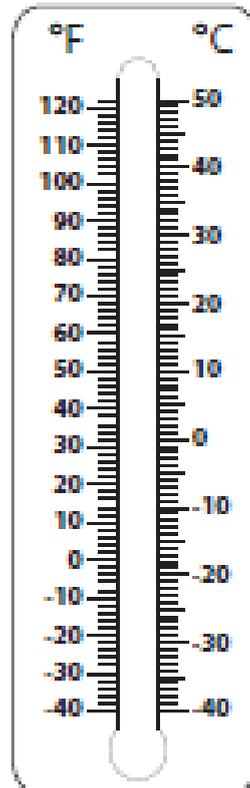
5) 12°C



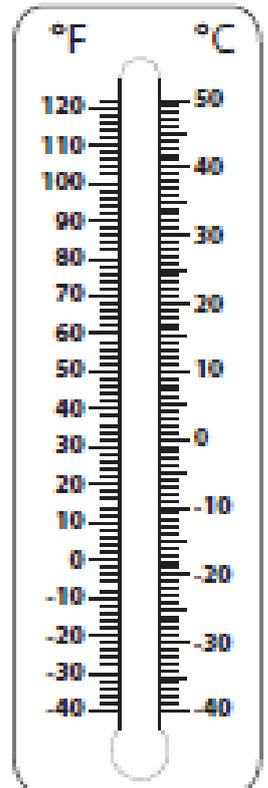
6) 78°F



7) -27°C

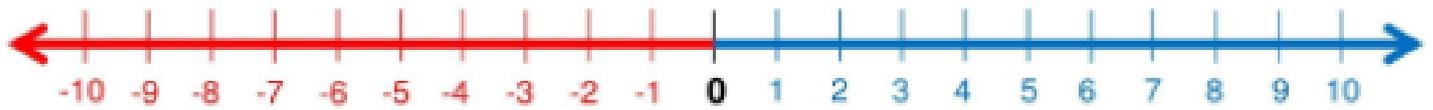


8) 112°F



Calculations with Negative numbers

Number Line: Positive & Negative Integers



Use the number line above to calculate the answers to the questions below. For these questions, you can follow the simple rules, if you subtract a number you move along the number line to the left, if you add a number you move along the number line to the right.

1. $2 - 3 =$

2. $1 - 4 =$

3. $4 - 5 =$

4. $3 - 6 =$

5. $2 - 7 =$

6. $1 - 4 =$

7. $3 - 4 =$

8. $1 - 2 =$

9. $5 - 7 =$

10. $4 - 6 =$

11. $5 - 3 =$

12. $4 - 2 =$

13. $-1 - 3 =$

14. $-4 - 1 =$

15. $-2 - 2 =$

16. $3 - 5 =$

17. $-4 + 2 =$

18. $-2 + 5 =$

19. $-1 + 3 =$

20. $-3 + 7 =$

21. $-5 + 4 =$

22. $-2 + 6 =$

23. $-5 + 1 =$

24. $0 - 3 =$

25. $-5 + 5 =$

Negative Numbers and Temperature

Amazing Fact

The warmest temperature ever recorded at the South Pole was a freezing -12.3°C in December 2011, making it one of the coldest places on Earth.

Challenge

Complete the activities using negative numbers in a temperature context.

1. Put these temperatures in order, the coldest first.

a. 2°C , -8°C , -1°C , -6°C , -4°C

b. 6°C , 10°C , -15°C , -11°C , 14°C

c. 16°C , 18°C , -23°C , -25°C , -13°C , 12°C , 20°C

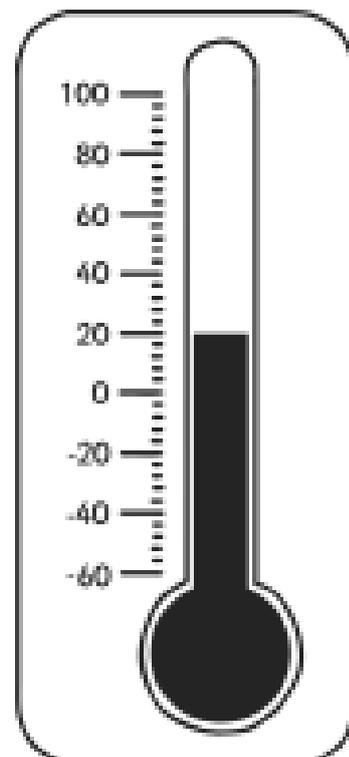
2. Which of these temperatures is lowest?

a. -4°C or -2°C

b. -8°C or 8°C

c. -16°C or -17°C

d. -5°C or -6°C



3. Answer the questions below:

a. The temperature rises by 15 degrees from -4°C . What is the new temperature?

b. The temperature falls from 11°C to -2°C . How many degrees does the temperature fall?

c. The temperature is 6°C . It falls by 8 degrees. What is the temperature now?

d. The temperature is -3°C . How much must it rise to reach 5°C ?

e. What is the difference in temperature between -4°C and 14°C ?

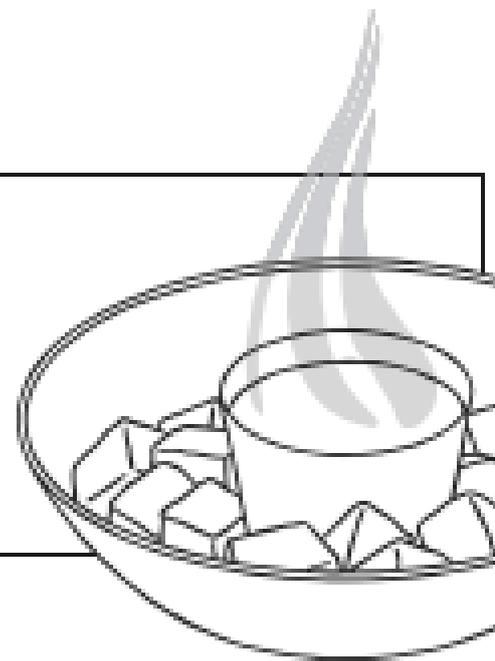
f. The temperature was -5°C . It falls by 6 degrees. What is the temperature now?

g. The temperature is -11°C . It rises by 2 degrees. What is the temperature now?

h. The temperature is -20°C . How much must it rise to reach -5°C ?

You could also try to find out:

- which places, if any, are colder;
- how scientists based at the South Pole survive the cold;
- when, and for how long, the South Pole gets sunshine;
- where the hottest place on Earth is.

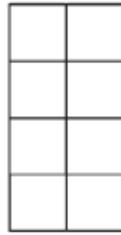


Common Equivalent fractions – Lesson 3

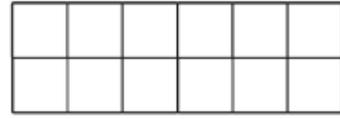
Shade $\frac{1}{2}$ of each shape. Look at how many squares are shaded (numerator) and the total amount of squares (denominator) and write the equivalent fraction underneath.



1. ____

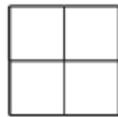


2. ____

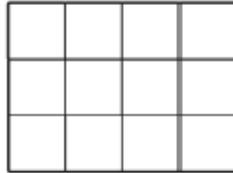


3. ____

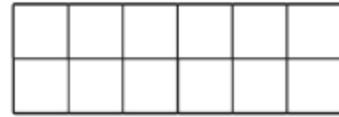
Shade $\frac{1}{4}$ of each shape. Look at how many squares are shaded (numerator) and the total amount of squares (denominator) and write the equivalent fraction underneath.



1. ____



2. ____



3. ____

First, divide each line according to the denominator shown. Then, use each fraction line to find the equivalent fractions.



$\frac{1}{2}$



$\frac{1}{3}$



$\frac{1}{4}$



$\frac{1}{6}$



$\frac{1}{8}$



$\frac{1}{12}$

1. $\frac{6}{12} = \frac{\square}{2}$

2. $\frac{3}{\square} = \frac{1}{4}$

3. $\frac{2}{\square} = \frac{4}{12}$

4. $\frac{\square}{4} = \frac{6}{8}$

5. $\frac{4}{\square} = \frac{1}{3}$

6. $\frac{5}{6} = \frac{10}{\square}$

7. $\frac{2}{3} = \frac{8}{\square}$

8. $\frac{1}{\square} = \frac{2}{12}$

Challenge:

Using what you've learnt about the equivalence between the fractions above, can you work out these equivalent fractions?

9. $\frac{1}{3} = \frac{\square}{9}$

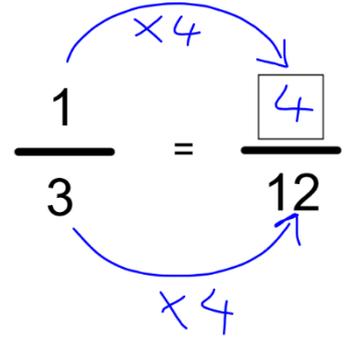
10. $\frac{7}{8} = \frac{\square}{16}$

11. $\frac{5}{12} = \frac{10}{\square}$

12. $\frac{2}{3} = \frac{\square}{9}$

Common Equivalent fractions – Lesson 3

In these next set of questions, you do not need fraction bars to calculate equivalent fractions. Look at the denominators in both fractions and work out what the first denominator has been multiplied by to get the second denominator (in the example here the 3 was multiplied by 4 to get 12). Then treat the numerator the same (therefore multiply the known numerator by 4)



Fill in the numerator to make the fractions equivalent.

1.

$$\frac{1}{2} = \frac{\boxed{}}{4}$$

2.

$$\frac{1}{12} = \frac{\boxed{}}{24}$$

3.

$$\frac{1}{10} = \frac{\boxed{}}{20}$$

4.

$$\frac{1}{8} = \frac{\boxed{}}{16}$$

5.

$$\frac{3}{20} = \frac{\boxed{}}{40}$$

6.

$$\frac{1}{6} = \frac{\boxed{}}{12}$$

7.

$$\frac{1}{5} = \frac{\boxed{}}{10}$$

8.

$$\frac{1}{4} = \frac{\boxed{}}{16}$$

9.

$$\frac{3}{10} = \frac{\boxed{}}{20}$$

10.

$$\frac{1}{3} = \frac{\boxed{}}{12}$$

11.

$$\frac{7}{20} = \frac{\boxed{}}{40}$$

12.

$$\frac{3}{8} = \frac{\boxed{}}{16}$$

13.

$$\frac{2}{5} = \frac{\boxed{}}{20}$$

14.

$$\frac{5}{12} = \frac{\boxed{}}{24}$$

15.

$$\frac{19}{20} = \frac{\boxed{}}{40}$$

16.

$$\frac{3}{5} = \frac{\boxed{}}{20}$$

17.

$$\frac{5}{8} = \frac{\boxed{}}{16}$$

18.

$$\frac{2}{3} = \frac{\boxed{}}{6}$$

19.

$$\frac{3}{4} = \frac{\boxed{}}{8}$$

20.

$$\frac{4}{5} = \frac{\boxed{}}{10}$$

21.

$$\frac{5}{6} = \frac{\boxed{}}{12}$$

22.

$$\frac{7}{8} = \frac{\boxed{}}{16}$$

23.

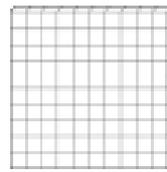
$$\frac{9}{10} = \frac{\boxed{}}{40}$$

24.

$$\frac{11}{12} = \frac{\boxed{}}{24}$$

Hundredths – Lesson 4

We can use Dienes to represent hundredths and tenths.



one whole

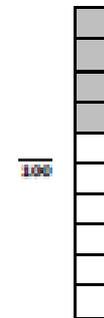
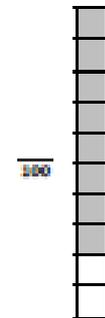
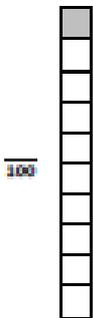
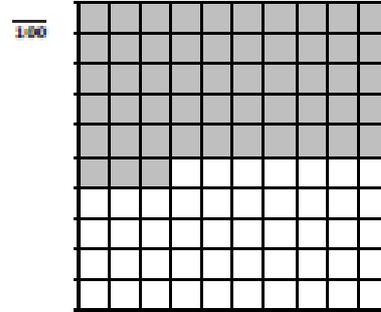
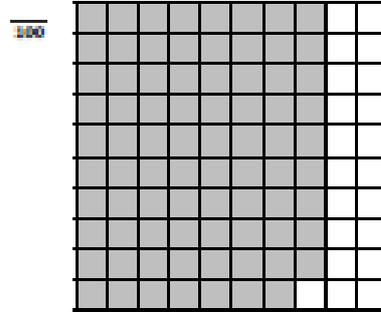
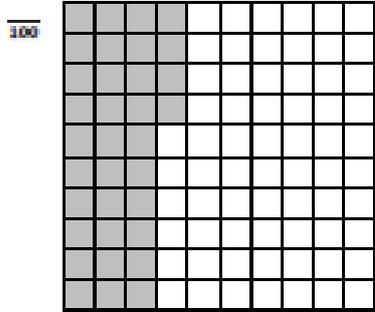


$\frac{1}{10}$

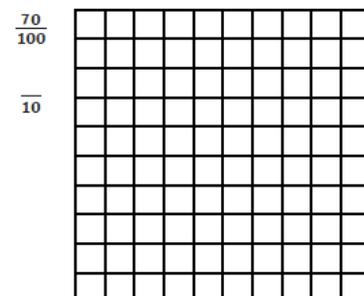
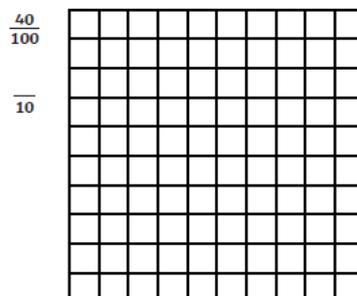
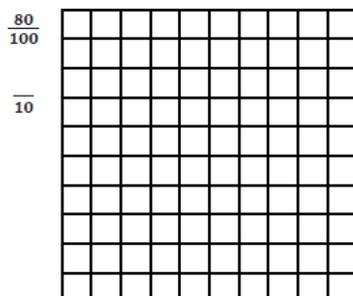
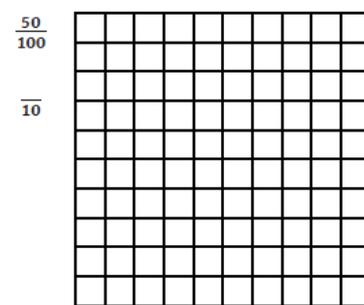
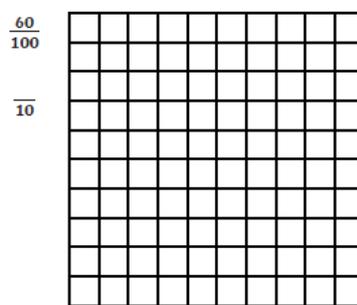
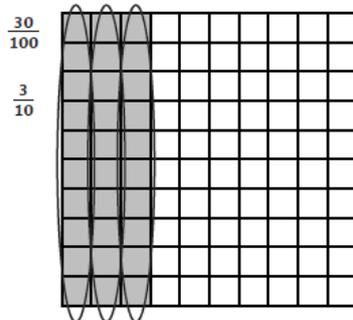


$\frac{1}{100}$

1. How many hundredths is represented by each picture?



2. Each square is one whole. Colour in the fraction for each square. Then draw circles to show tenths and write how many tenths you have coloured.



2. Complete the following pairs of equivalent fractions. You could use a Hundredths and Tenths Grid to help you.

a. $\frac{30}{100} = \frac{\quad}{10}$

c. $\frac{\quad}{100} = \frac{7}{10}$

e. $\frac{60}{100} = \frac{9}{10}$

b. $\frac{\quad}{100} = \frac{5}{10}$

d. $\frac{30}{100} = \frac{\quad}{10}$

f. $\frac{60}{100} = \frac{\quad}{10}$

Hundredths – Lesson 4 (continued)

Use a hundredths square to help you to answer the following questions.

Complete the number sequences:

1. $\underline{\quad}$, $\underline{\quad}$, $\frac{97}{100}$, $\frac{98}{100}$, $\underline{\quad}$, $\underline{\quad}$

5. $\frac{78}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{70}{100}$, $\frac{68}{100}$, $\underline{\quad}$, $\underline{\quad}$

2. $\underline{\quad}$, $\frac{64}{100}$, $\underline{\quad}$, $\frac{64}{100}$, $\underline{\quad}$, $\frac{62}{100}$, $\underline{\quad}$, $\frac{60}{100}$

6. $\frac{40}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{52}{100}$, $\underline{\quad}$, $\frac{60}{100}$, $\underline{\quad}$

3. $\frac{54}{100}$, $\frac{58}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{66}{100}$, $\underline{\quad}$

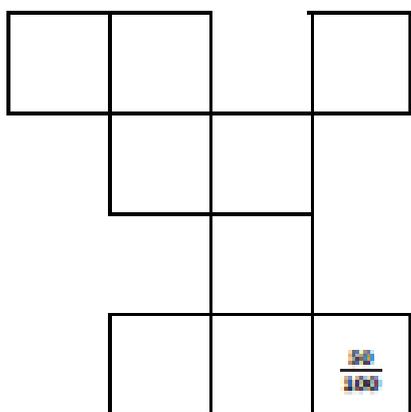
7. $\frac{30}{100}$, $\frac{27}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{12}{100}$

4. $\frac{38}{100}$, $\underline{\quad}$, $\frac{38}{100}$, $\underline{\quad}$, $\frac{40}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{55}{100}$

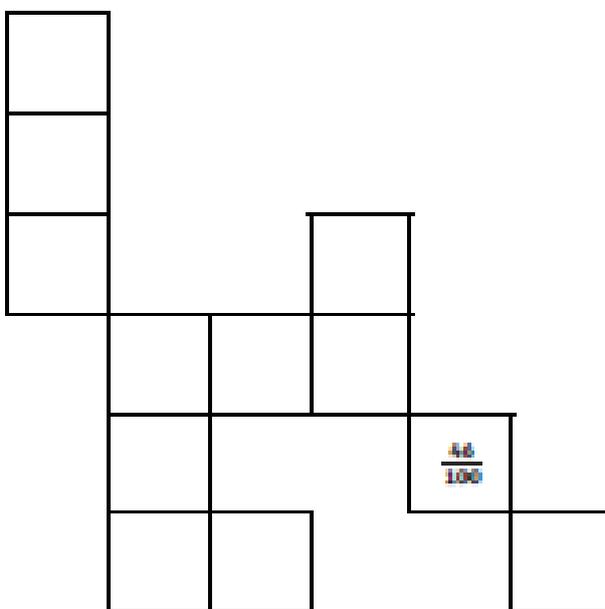
8. $\frac{30}{100}$, $\underline{\quad}$, $\underline{\quad}$, $\frac{15}{100}$, $\frac{10}{100}$, $\underline{\quad}$, $\underline{\quad}$

A hundredths square has been cut into pieces. Complete each piece by writing in the missing hundredths.

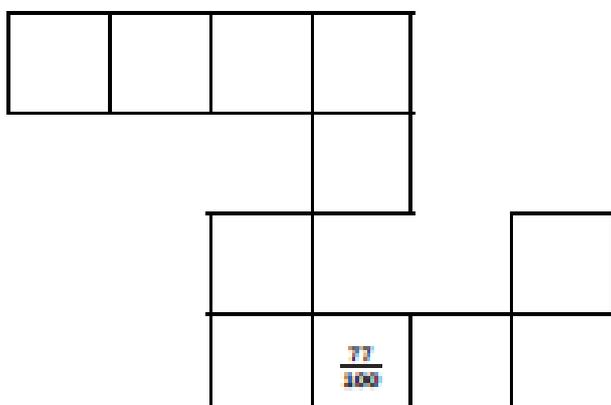
9.



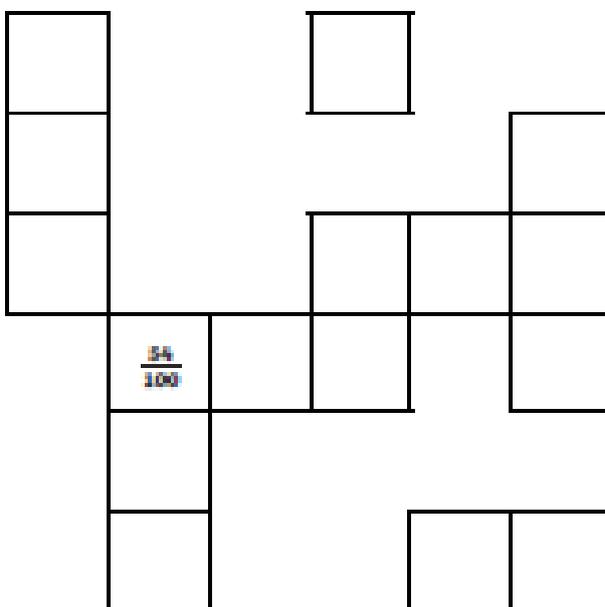
11.



10.



12.



Estimating Answers – Lesson 5

For each question, round each number to the nearest 100, and use this to help calculate an estimate to the answer. One has been completed below showing you how to complete the work.

11. Which of these calculations give an answer of about 2500?

$$1243 + 2217$$

$$1183 + 1335$$

$$261 + 2731$$

$$1705 + 87$$

$$1,243 + 2,217 = 1,200 + 2,200 = 3,400$$

$$1,183 + 1,335 = 1,200 + 1,300 = 2,500 \checkmark$$

$$261 + 2,731 = 300 + 2,700 = 3,000$$

$$1,705 + 87 = 1,700 + 100 = 1,800$$

6. Which of these calculations give an answer of about 1500?	7. Which of these calculations give an answer of about 2000?	8. Which of these calculations give an answer of about 3000?	9. Which of these calculations give an answer of about 4000?	10. Which of these calculations give an answer of about 5000?
756 + 747 623 + 576 1225 + 261 925 + 403	1600 + 200 400 + 1900 1300 + 700 1500 + 1500	1500 + 1075 2050 + 960 1025 + 1750 750 + 2200	2314 + 1219 1294 + 3213 3011 + 1012 2410 + 1056	2345 + 2675 1350 + 3450 2085 + 1800 2345 + 3160

As above, round each number to the nearest 100, and use this to help calculate an estimate to the answer. One has been completed below showing you how to complete the work.

Note it is subtraction this time,

5. Which of these calculations give an answer of about 500?

$$834 - 323$$

$$1224 - 756$$

$$968 - 362$$

$$543 - 131$$

$$834 - 323 = 800 - 300 = 500 \checkmark$$

$$1,224 - 756 = 1,200 - 800 = 400$$

$$968 - 362 = 1,000 - 400 = 600$$

$$543 - 131 = 500 - 100 = 400$$

6. Which of these calculations give an answer of about 600?	7. Which of these calculations give an answer of about 700?	8. Which of these calculations give an answer of about 750?	9. Which of these calculations give an answer of about 900?	10. Which of these calculations give an answer of about 1000?
796 - 127 623 - 121 1250 - 540 945 - 343	1220 - 600 2550 - 1840 1310 - 720 2000 - 1160	1520 - 775 2015 - 1320 2230 - 1250 3050 - 2200	2334 - 1429 4294 - 3213 3061 - 1042 2471 - 1353	3242 - 2215 5113 - 4035 6226 - 521 1750 - 550

Using Inverse operations to check calculations – Lesson 6

Check the answers to these calculations using the inverse operation and mark them right or wrong!

	Calculation	Check with Inverse	Correct?
e.g.	$\begin{array}{r} 557 \\ - 278 \\ \hline 277 \end{array}$ <p><i>work backwards!</i></p>	$\begin{array}{r} 277 \\ + 278 \\ \hline 555 \end{array}$	Wrong!
1.	$\begin{array}{r} 87 \\ + 446 \\ \hline 459 \end{array}$		
2.	$\begin{array}{r} 144 \\ - 75 \\ \hline 69 \end{array}$		
3.	$\begin{array}{r} 367 \\ + 459 \\ \hline 826 \end{array}$		
4.	$\begin{array}{r} 674 \\ - 596 \\ \hline 182 \end{array}$		
5.	$\begin{array}{r} 286 \\ + 1378 \\ \hline 1662 \end{array}$		
6.	$\begin{array}{r} 1342 \\ - 478 \\ \hline 942 \end{array}$		
7.	$\begin{array}{r} 2786 \\ + 1512 \\ \hline 4299 \end{array}$		
8.	$\begin{array}{r} 2457 \\ - 1687 \\ \hline 770 \end{array}$		

[Now complete these questions below and check your answers by using the inverse operations.](#)

$$\begin{array}{r} 6911 \\ + 6251 \\ \hline \end{array}$$

$$\begin{array}{r} 6074 \\ + 2922 \\ \hline \end{array}$$

$$\begin{array}{r} 3729 \\ - 2402 \\ \hline \end{array}$$

$$\begin{array}{r} 4245 \\ - 1949 \\ \hline \end{array}$$

Factor pairs (Day 1) - Lesson 7

To find the **factors** of a number, you need to find all the pairs of numbers that multiply together to make a **product**.

$$2 \times 5 = 10$$

2 and 5 are **factors**. 10 is the **product**.

Find all the factors for the numbers below. The first one has been started for you.

30	1	15	10	30				
----	---	----	----	----	--	--	--	--

12							
----	--	--	--	--	--	--	--

9							
---	--	--	--	--	--	--	--

22							
----	--	--	--	--	--	--	--

16							
----	--	--	--	--	--	--	--

13							
----	--	--	--	--	--	--	--

7							
---	--	--	--	--	--	--	--

50							
----	--	--	--	--	--	--	--

14							
----	--	--	--	--	--	--	--

33							
----	--	--	--	--	--	--	--

18							
----	--	--	--	--	--	--	--

List the factors of these numbers:

1. 16

2. 21

3. 24

4. 48

5. 64

List the factors of these numbers:

6. 7

7. 11

8. 23

9. 13

10. 5

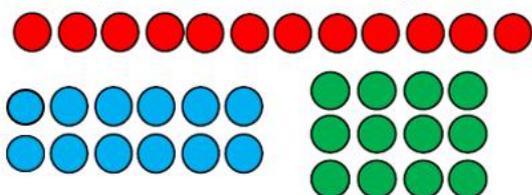
What do you notice about these numbers? (Questions 6-10)

These numbers are called prime numbers.

Can you find three more prime numbers? _____, _____, _____

Varied Fluency

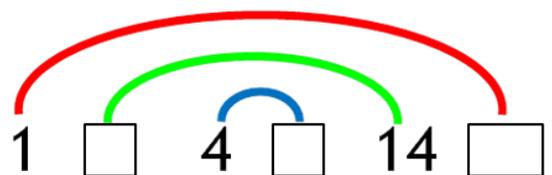
1 What factor pairs for 12 do these arrays show?



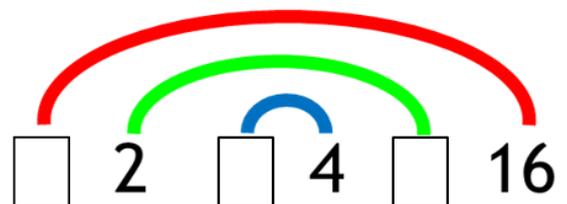
Use counters to create arrays for 24. How many factor pairs can you find?

2. Complete these factor rainbows.

This rainbow is for 28.



This rainbow is for 16.



3. Draw your own factor rainbow for 20.

Factor pairs (Day 2) - Lesson 8

1

The factor pairs of 15 are:

and

and

Write all the factor pairs of 20:

and

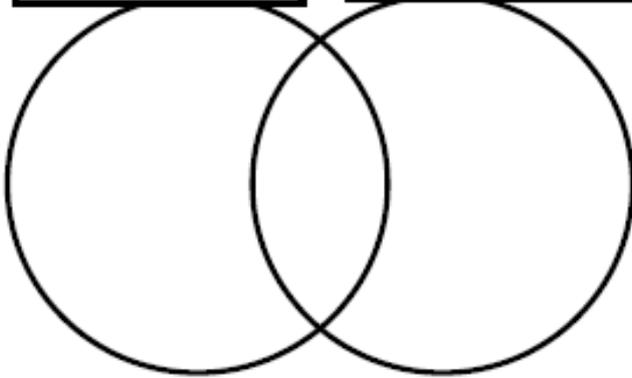
and

and

2

factor of 24

factor of 60



Write each of these numbers in its correct place on the Venn diagram.

3

Write **all** the numbers that are a factor of 18 **and** a factor of 30.

4

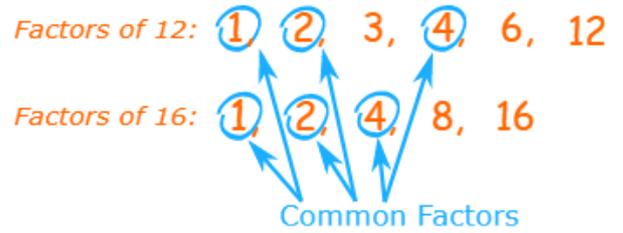
Write **all** the numbers between 50 and 100 that are **factors of 360**.

5

The number **40** has **eight factors**. (1, 2, 4, 5, 8, 10, 20, 40)

Write another number **less than 50** that has **eight factors**.

When we find the factors of two or more numbers, and then find some factors are the same ("common"), then they are the "common factors".

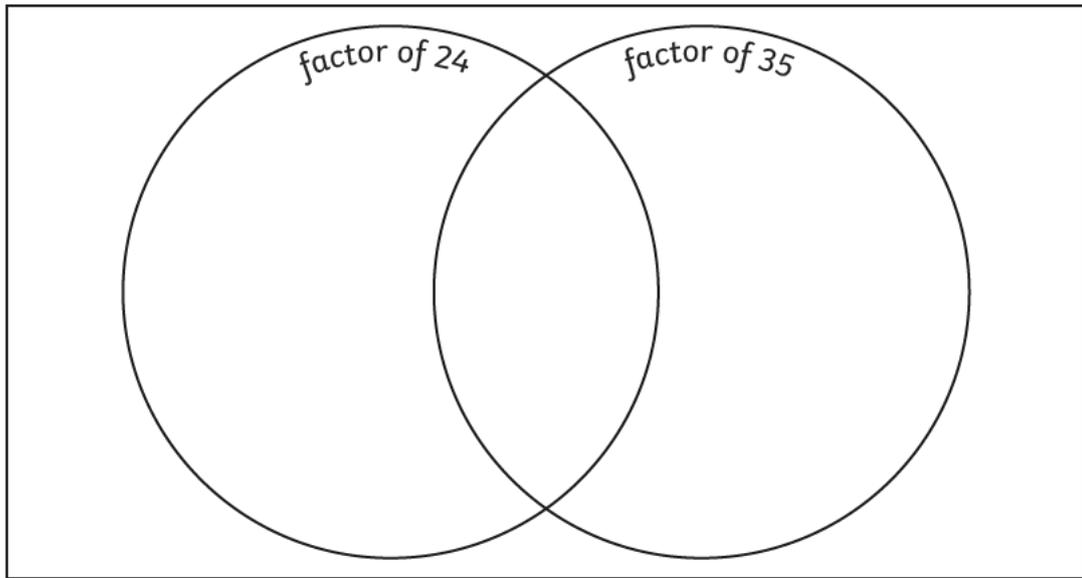


Example: 12 and 16

- The factors of 12 are: 1, 2, 3, 4, 6 and 12
- The factors of 16 are: 1, 2, 4, 8 and 16

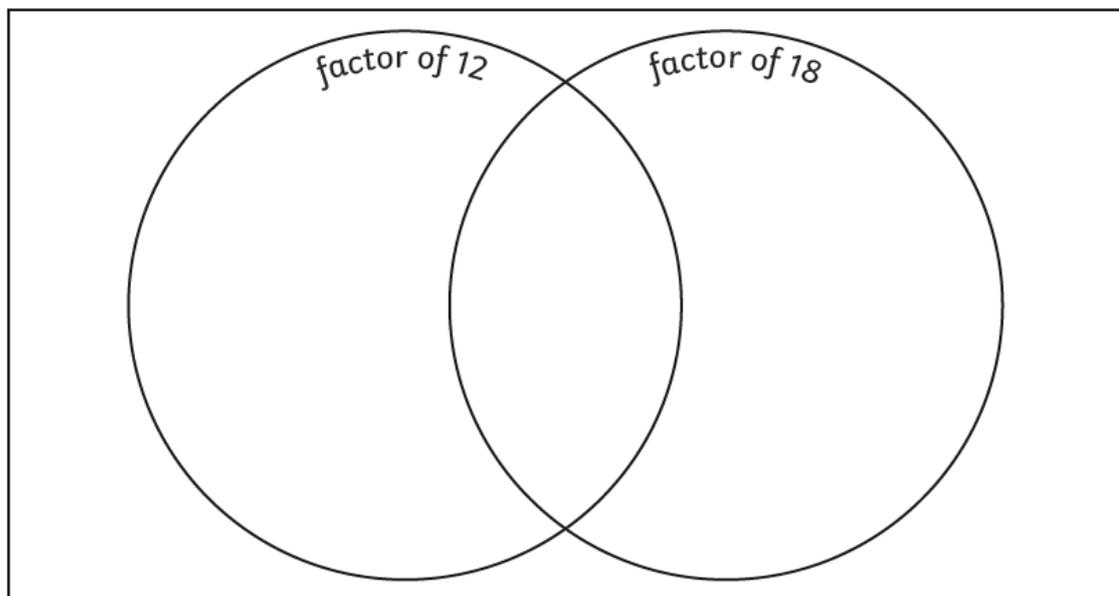
So the common factors of 12 and 16 are: 1, 2 and 4

1) Place the numbers 1-35 correctly onto the Venn diagram.



What are the common factors? _____

2) Place the numbers 1-18 correctly onto the Venn diagram.



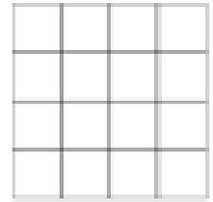
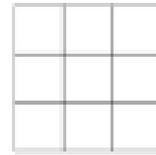
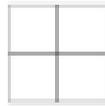
What are the common factors? _____

What is the highest common factor? _____

Square Numbers - Lesson 9

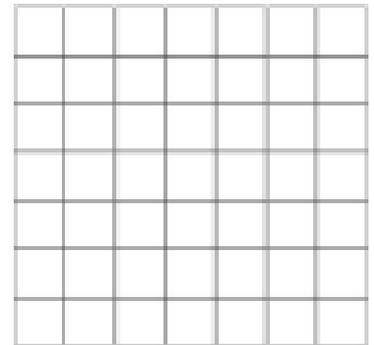
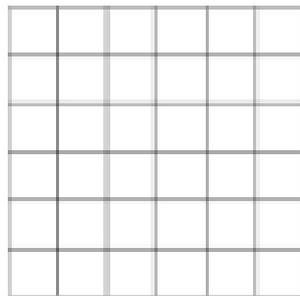
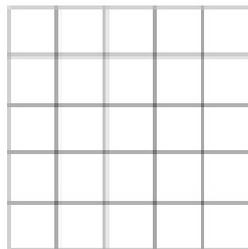
A number which is multiplied by itself. $2^2 = 2 \times 2 = 4$

Write the number that is squared and the square number for each of these diagrams.



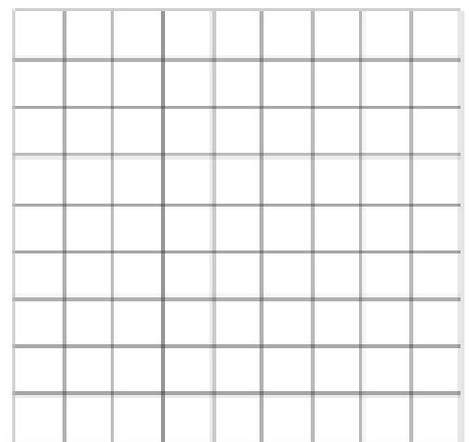
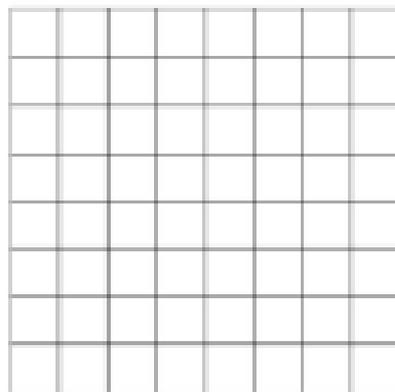
Number Squared: _____

Square Number: _____



Number Squared: _____

Square Number: _____

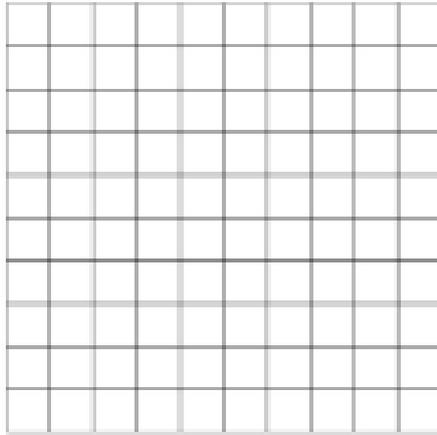


Number Squared: _____

Square Number: _____

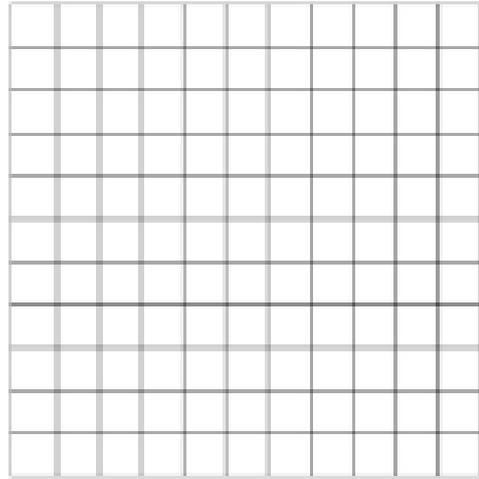
Square Numbers - Lesson 9 (continued)

Write the number that is squared and the square number for each of these diagrams.



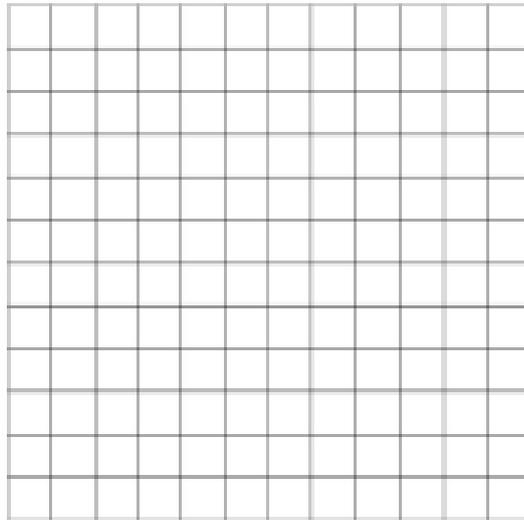
Number Squared: _____

Square Number: _____



Number Squared: _____

Square Number: _____



Number Squared: _____

Square Number: _____

Ring the square numbers.

1	49	4	17	36	89	144
75	101	81	123	46	9	
100	25	66	16	121	12	64

Cube Numbers - Lesson 10

A number which is multiplied by itself and then multiplied by itself again.

$$2^3 = 2 \times 2 \times 2 = 8$$

Write the number that is cubed and the cube number for each of these diagrams.



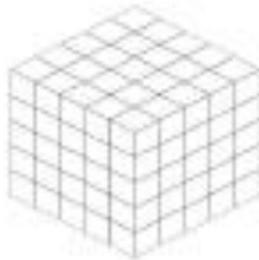
Number Cubed: _____



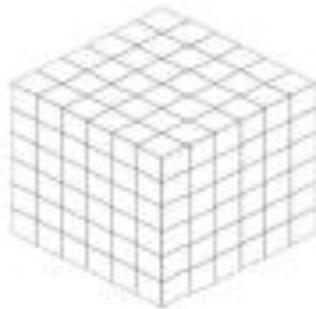


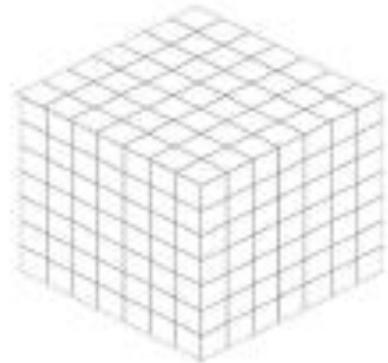


Cube Number: _____

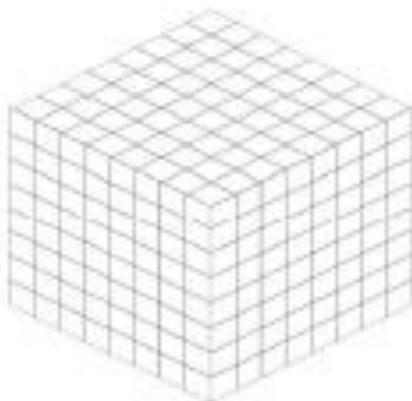


Number Cubed: _____

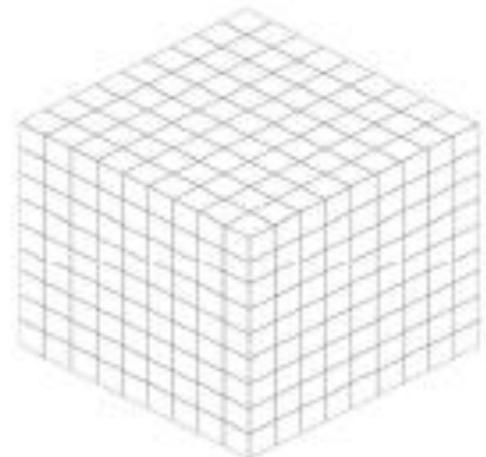




Cube Number: _____



Number Cubed: _____



Cube Number: _____

Cube Numbers - Lesson 10 (continued)

Ring the cube numbers.

1	12	343	8	1000	125	
89	64	50	81	27	1200	9
729	42	216	100	512		

Match the squared and cube numbers.

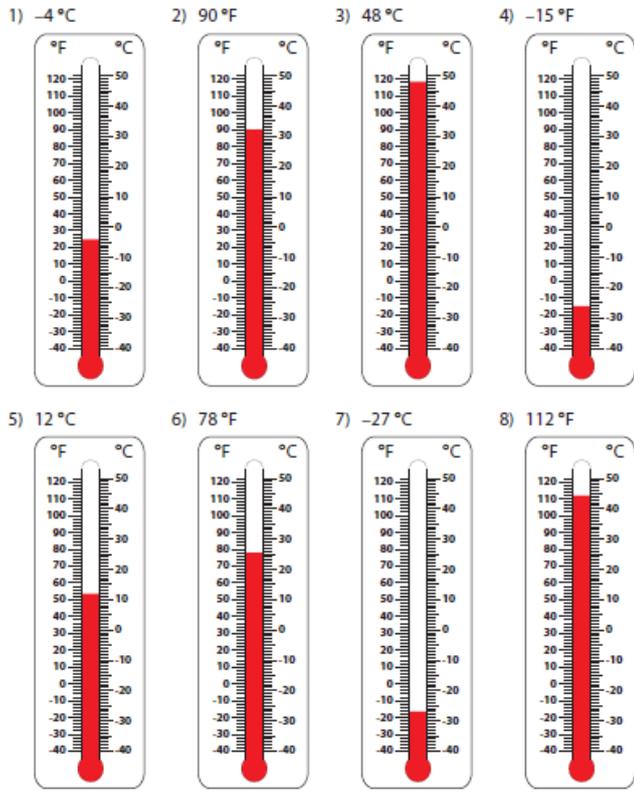
2^2	49	1^3
6^2	25	
3^2	121	4^3
7^2	216	
11^2	144	6^3
9^2	16	
12^2	64	3^3
1^2	125	
4^2	1	2^3
5^2	81	
8^2	9	5^3
	27	
	36	
	8	
	4	

Answers

When you have completed your work each day – check/mark your answers to see how you have performed.

Negative Numbers (Day 1) – Lesson 1

Shade each thermometer to indicate the specified temperature.



Calculations with Negative numbers

- | | |
|--------|--------|
| 1. -1 | 14. -5 |
| 2. -3 | 15. -4 |
| 3. -1 | 16. -2 |
| 4. -3 | 17. -2 |
| 5. -5 | 18. 3 |
| 6. -3 | 19. 2 |
| 7. -1 | 20. 4 |
| 8. -1 | 21. -1 |
| 9. -2 | 22. 4 |
| 10. -2 | 23. -4 |
| 11. -2 | 24. -3 |
| 12. -2 | 25. 0 |
| 13. -4 | |

Negative Numbers (Day 2) – Lesson 2

Calculations with Negative numbers

1

- a) -3
- b) -7
- c) -1
- d) -7
- e) 4
- f) -9
- g) -8
- h) -2
- i) -6
- j) -4
- k) -8
- l) -10

2

- a) -2
- b) -10
- c) -7
- d) -6
- e) 3
- f) 3
- g) 6
- h) 7
- i) -5
- j) -7
- k) 3
- l) -2

Negative Numbers and Temperature .

1.

- a. $-8^{\circ}\text{C}, -6^{\circ}\text{C}, -4^{\circ}\text{C}, -1^{\circ}\text{C}, 2^{\circ}\text{C}$.
- b. $-15^{\circ}\text{C}, -11^{\circ}\text{C}, 6^{\circ}\text{C}, 10^{\circ}\text{C}, 14^{\circ}\text{C}$
- c. $-25^{\circ}\text{C}, -23^{\circ}\text{C}, -13^{\circ}\text{C}, 12^{\circ}\text{C}, 16^{\circ}\text{C}, 18^{\circ}\text{C}, 20^{\circ}\text{C}$

2.

- a. -4°C
- b. -8°C
- c. -17°C
- d. -6°C

3.

- a. 11°C
- b. 13°C
- c. -2°C
- d. 8°C
- e. 18°C
- f. -11°C
- g. -9°C
- h. 15°C

Common Equivalent fractions – Lesson 3

$$\frac{1}{2}$$

1. Any 3 squares shaded
2. Any 4 squares shaded
3. Any 6 squares shaded

$$\frac{1}{4}$$

1. Any 1 square shaded
2. Any 3 squares shaded
3. Any 3 squares shaded

$$1. \frac{6}{12} = \frac{\boxed{1}}{2}$$

$$2. \frac{3}{\boxed{12}} = \frac{1}{4}$$

$$3. \frac{2}{\boxed{6}} = \frac{4}{12}$$

$$4. \frac{\boxed{3}}{4} = \frac{6}{8}$$

$$5. \frac{4}{\boxed{12}} = \frac{1}{3}$$

$$6. \frac{5}{6} = \frac{10}{\boxed{12}}$$

$$7. \frac{2}{3} = \frac{8}{\boxed{12}}$$

$$8. \frac{1}{\boxed{6}} = \frac{2}{12}$$

Challenge:

Using what you've learnt about the equivalence between the fractions above, can you work out these equivalent fractions?

$$9. \frac{1}{3} = \frac{\boxed{3}}{9}$$

$$10. \frac{7}{8} = \frac{\boxed{14}}{16}$$

$$11. \frac{5}{12} = \frac{10}{\boxed{24}}$$

$$12. \frac{2}{3} = \frac{\boxed{6}}{9}$$

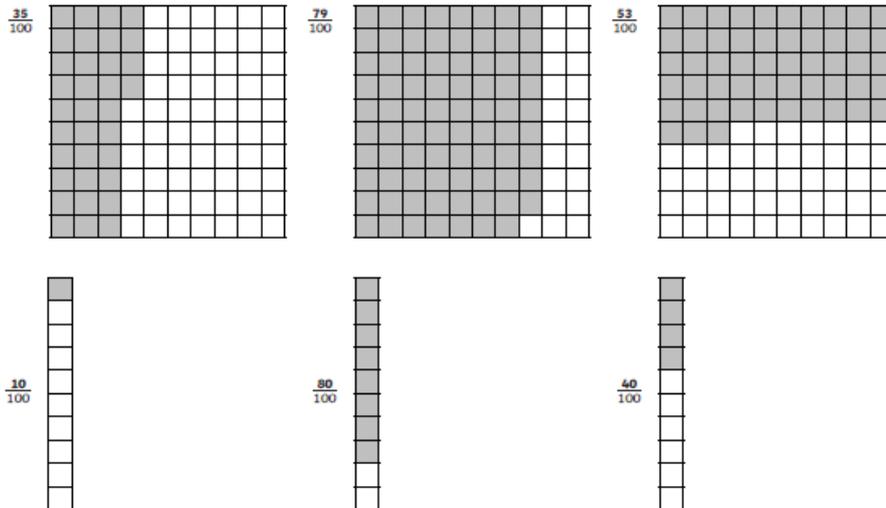
Find the Equivalent Fractions **Answers**

Fill in the numerator to make the fractions equivalent.

Question	Answer	Question	Answer
1	2	13	8
2	2	14	10
3	2	15	38
4	2	16	12
5	6	17	10
6	2	18	4
7	2	19	6
8	4	20	8
9	6	21	10
10	4	22	14
11	14	23	36
12	6	24	22

Hundredths - Lesson 4

1. How many hundredths is represented by each picture?



2. Complete the following pairs of equivalent fractions. You could use a Hundredths and Tenth Grid to help you.

a. $\frac{20}{100} = \frac{2}{10}$ c. $\frac{70}{100} = \frac{7}{10}$ e. $\frac{90}{100} = \frac{9}{10}$
 b. $\frac{50}{100} = \frac{5}{10}$ d. $\frac{30}{100} = \frac{3}{10}$ f. $\frac{60}{100} = \frac{6}{10}$

Use a hundredths square to help you to answer the following questions.

Complete the number sequences:

- $\frac{95}{100}, \frac{96}{100}, \frac{97}{100}, \frac{98}{100}, \frac{99}{100}, \frac{100}{100}$
- $\frac{47}{100}, \frac{66}{100}, \frac{65}{100}, \frac{64}{100}, \frac{63}{100}, \frac{62}{100}, \frac{61}{100}, \frac{60}{100}$
- $\frac{56}{100}, \frac{50}{100}, \frac{60}{100}, \frac{62}{100}, \frac{64}{100}, \frac{66}{100}, \frac{68}{100}$
- $\frac{20}{100}, \frac{25}{100}, \frac{30}{100}, \frac{35}{100}, \frac{40}{100}, \frac{45}{100}, \frac{50}{100}, \frac{55}{100}$
- $\frac{76}{100}, \frac{74}{100}, \frac{72}{100}, \frac{70}{100}, \frac{68}{100}, \frac{66}{100}, \frac{64}{100}$
- $\frac{40}{100}, \frac{44}{100}, \frac{46}{100}, \frac{52}{100}, \frac{56}{100}, \frac{60}{100}, \frac{64}{100}$
- $\frac{30}{100}, \frac{27}{100}, \frac{24}{100}, \frac{21}{100}, \frac{18}{100}, \frac{15}{100}, \frac{12}{100}$
- $\frac{30}{100}, \frac{25}{100}, \frac{20}{100}, \frac{15}{100}, \frac{10}{100}, \frac{5}{100}, \frac{0}{100}$

A hundredths square has been cut into pieces. Complete each piece by writing in the missing hundredths.

9.

$\frac{17}{100}$	$\frac{18}{100}$		$\frac{20}{100}$
	$\frac{28}{100}$	$\frac{29}{100}$	
		$\frac{39}{100}$	
	$\frac{48}{100}$		$\frac{50}{100}$

10.

$\frac{44}{100}$	$\frac{45}{100}$	$\frac{46}{100}$	$\frac{47}{100}$
			$\frac{57}{100}$
	$\frac{66}{100}$		$\frac{69}{100}$
	$\frac{76}{100}$	$\frac{77}{100}$	$\frac{78}{100}$

11.

$\frac{7}{100}$			
$\frac{12}{100}$			
$\frac{22}{100}$			$\frac{25}{100}$
	$\frac{33}{100}$	$\frac{34}{100}$	$\frac{35}{100}$
	$\frac{43}{100}$		$\frac{46}{100}$
	$\frac{53}{100}$	$\frac{54}{100}$	$\frac{57}{100}$

12.

$\frac{23}{100}$		$\frac{26}{100}$	
$\frac{33}{100}$			$\frac{38}{100}$
$\frac{43}{100}$		$\frac{46}{100}$	$\frac{47}{100}$
	$\frac{54}{100}$	$\frac{55}{100}$	$\frac{56}{100}$
	$\frac{64}{100}$		$\frac{58}{100}$
	$\frac{74}{100}$		$\frac{77}{100}$
			$\frac{78}{100}$

Estimating Answers - Lesson 5

6. Which of these calculations give an answer of about 1500?	7. Which of these calculations give an answer of about 2000?	8. Which of these calculations give an answer of about 3000?	9. Which of these calculations give an answer of about 4000?	10. Which of these calculations give an answer of about 5000?
$756 + 747$ $623 + 576$ $1225 + 261$ $925 + 403$	$1600 + 200$ $400 + 1900$ $1300 + 700$ $1500 + 1500$	$1500 + 1075$ $2050 + 960$ $1025 + 1750$ $750 + 2200$	$2314 + 1219$ $1294 + 3213$ $3011 + 1012$ $2410 + 1056$	$2345 + 2675$ $1350 + 3450$ $2085 + 1800$ $2345 + 3160$

6. Which of these calculations give an answer of about 600?	7. Which of these calculations give an answer of about 700?	8. Which of these calculations give an answer of about 750?	9. Which of these calculations give an answer of about 900?	10. Which of these calculations give an answer of about 1000?
$796 - 127$ $623 - 121$ $1250 - 540$ $945 - 343$	$1220 - 600$ $2550 - 1840$ $1310 - 720$ $2000 - 1160$	$1520 - 775$ $2015 - 1320$ $2230 - 1250$ $3050 - 2200$	$2334 - 1429$ $4294 - 3213$ $3061 - 1042$ $2471 - 1353$	$3242 - 2215$ $5113 - 4035$ $6226 - 521$ $1750 - 550$

Inverse Operations - Lesson 6

question	answer	
A.		
1	$459 - 446 = 13$	Wrong!
2	$75 + 69 = 144$	Correct!
3	$826 - 459 = 367$	Correct!
4	$182 + 596 = 778$	Wrong!
5	$1662 - 1378 = 284$	Wrong!
6	$942 + 478 = 1420$	Wrong!
7	$4299 - 1512 = 2787$	Wrong!
8	$770 + 1687 = 2457$	Correct!

$$\begin{array}{r} 6911 \\ + 6251 \\ \hline 13162 \end{array}$$

$$\begin{array}{r} 6074 \\ + 2922 \\ \hline 8996 \end{array}$$

$$\begin{array}{r} 3729 \\ - 2402 \\ \hline 1327 \end{array}$$

$$\begin{array}{r} 4245 \\ - 1949 \\ \hline 2296 \end{array}$$

Factor pairs (Day 1) - Lesson 7

Find the Factors

Find all the factors for the numbers below. The first one has been started for you.

30	1	15	10	30	2	3	5	6	
12	1	2	3	4	6	12			
9	1	3	9						
22	1	2	11	22					
16	1	2	4	8	16				
13	1	13							
7	1	7							
50	1	2	5	10	25	50			
14	1	2	7	14					
33	1	3	11	33					
18	1	2	3	6	9	18			

List the factors of these numbers:

- 16 1, 2, 4, 8, 16
- 21 1, 3, 7, 21
- 24 1, 2, 3, 4, 6, 8, 12, 24
- 48 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
- 64 1, 2, 4, 8, 16, 32, 64

List the factors of these numbers:

- 7 1, 7
- 11 1, 11
- 23 1, 23
- 13 1, 13
- 5 1, 5

What do you notice about these numbers?

They only have 1 and the number itself as factors

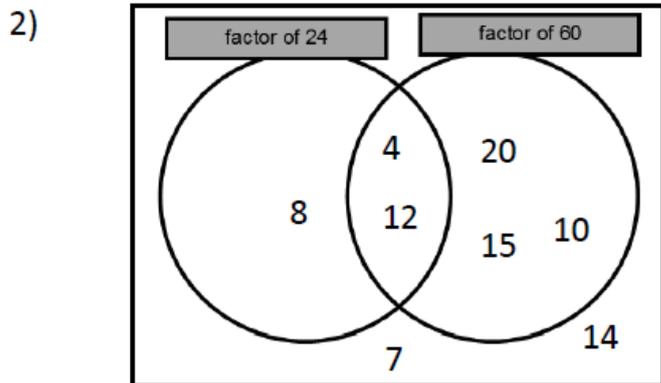
These numbers are called prime numbers.

Can you find three more prime numbers? **Multiple answers possible**

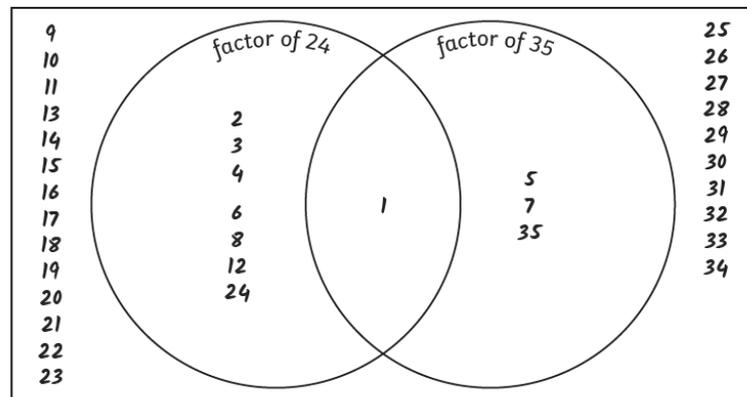
Factor pairs (Day 2) - Lesson 8

Answers:

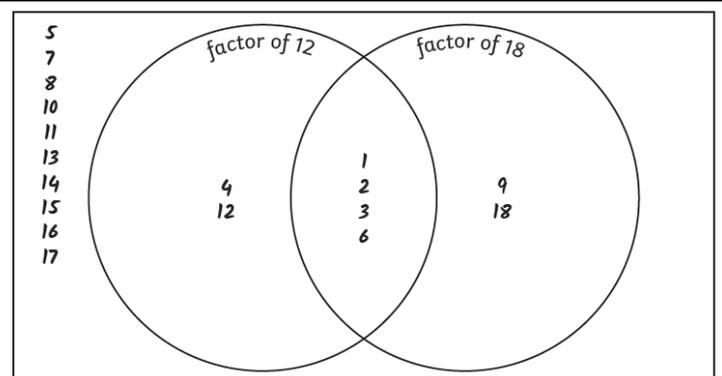
1) 1 and 20, 2 and 10, 4 and 5



3) 1,2,3,6 4)60 and 90 5) 30 or 32



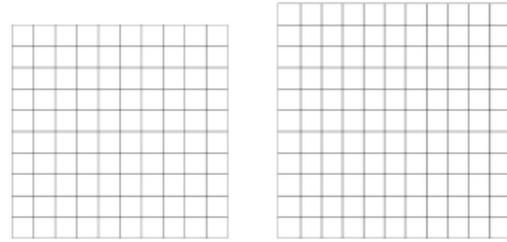
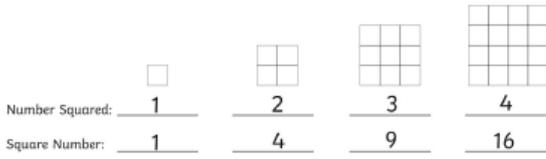
What are the common factors? 1



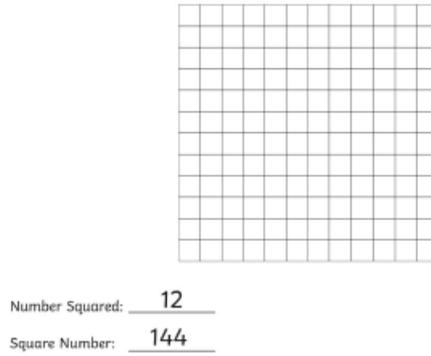
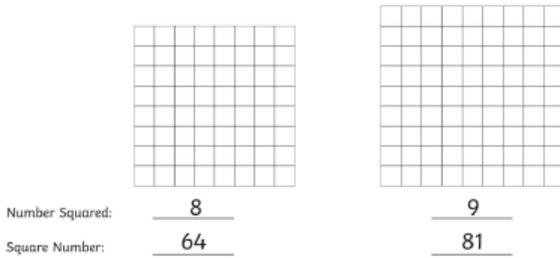
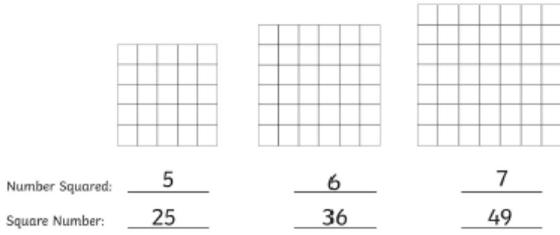
What are the common factors? 1, 2, 3, 6

What is the highest common factor? 6

Square Numbers – Lesson 9

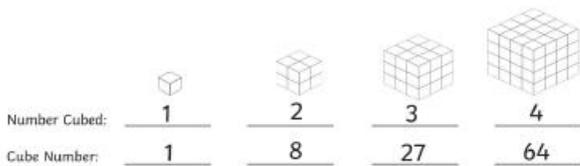
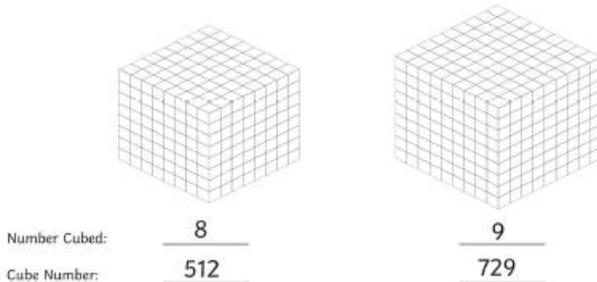
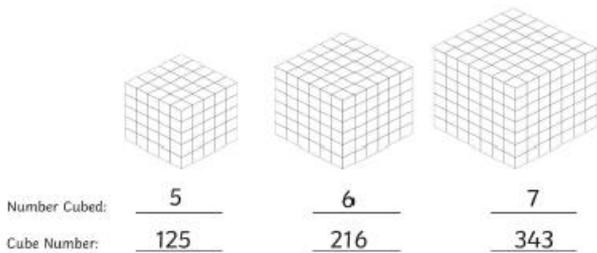


Number Squared: 10 Number Squared: 11
 Square Number: 100 Square Number: 121



Ring the square numbers.

Cube Numbers – Lesson 10

Match the squared and cube numbers.

