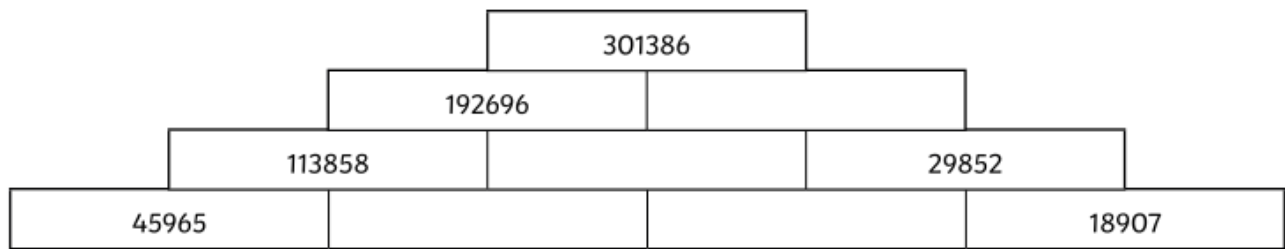
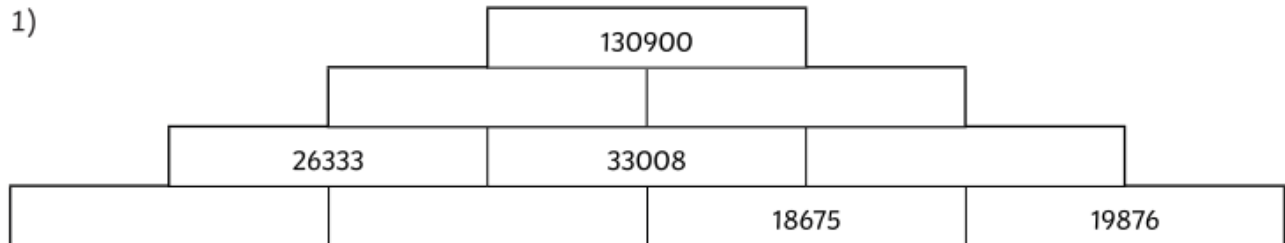


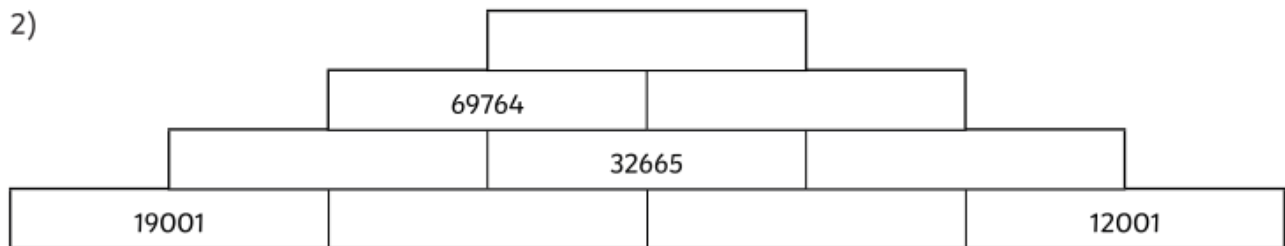
Use addition and subtraction calculations to complete these pyramids. The first one has been done for you.



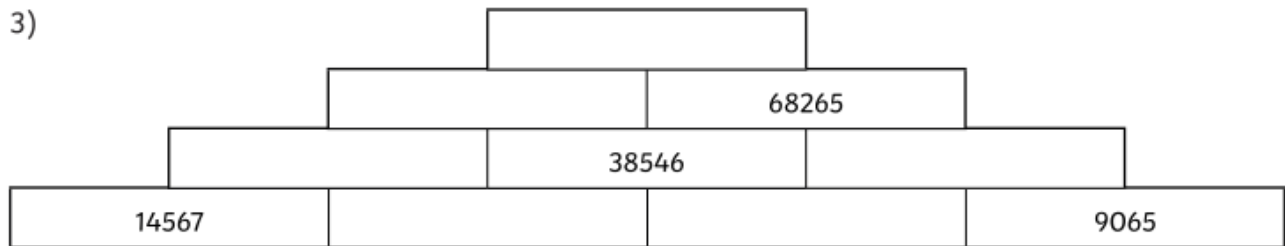
1)



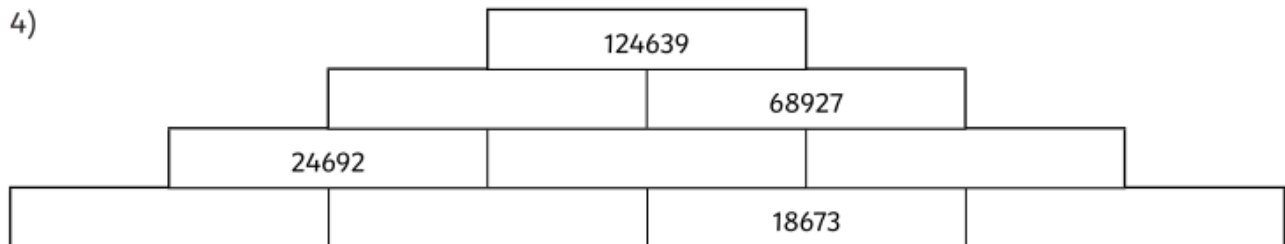
2)



3)



4)



# World's Biggest Cities Word Search

These are the 20 most populated cities in the world – can you find them all in the word search?

s	w	j	s	y	v	e	g	c	e	k	a	i	t	m	y	l	h
y	m	i	a	i	f	s	a	r	r	u	a	q	q	d	j	r	u
p	o	v	o	k	g	h	e	o	i	f	e	r	z	d	i	g	f
w	s	y	p	s	t	p	y	i	o	l	m	b	g	g	f	v	o
u	c	d	a	f	j	w	a	i	d	h	a	u	j	u	f	y	l
p	o	k	u	a	e	h	h	h	e	z	a	e	t	v	k	x	n
m	w	m	l	n	g	l	c	s	j	t	s	n	j	o	g	h	c
e	e	w	o	n	e	o	o	h	a	e	r	o	t	q	j	i	l
x	j	h	a	d	y	g	t	k	n	p	y	s	l	q	o	j	c
i	q	h	s	x	a	a	l	v	e	k	m	a	n	i	l	a	j
c	s	r	e	l	f	o	j	f	i	h	a	i	u	f	q	o	y
o	g	k	o	e	k	g	l	x	r	p	r	r	p	i	y	s	r
c	t	g	u	l	m	b	g	y	o	s	v	e	a	d	w	a	o
i	r	d	l	o	s	a	n	g	e	l	e	s	k	c	x	k	u
t	l	c	c	e	y	a	e	r	x	n	s	c	d	w	h	a	x
y	l	l	j	k	l	o	j	a	k	a	r	t	a	f	p	i	e
i	v	y	r	p	a	r	i	s	l	m	u	m	b	a	i	t	l
i	v	f	b	s	q	b	w	c	a	c	a	i	r	o	z	z	d

Buenos Aires	Kolkata	Moscow	Rio de Janeiro
Cairo	Lagos	Mumbai	Sao Paulo
Delhi	Los Angeles	New York	Seoul
Jakarta	Manila	Osaka	Shanghai
Karachi	Mexico City	Paris	Tokyo

## Extension:

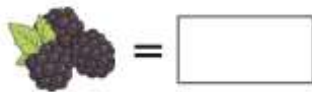
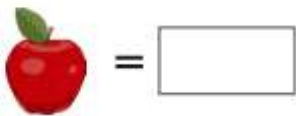
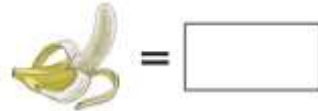
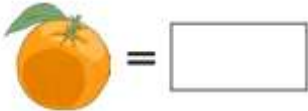
Choose two of the cities you know nothing about and find out five facts about each of them!

# Crack the Code

I can use multiplication facts to solve problems.



1. Can you use your maths detective skills to work out which numbers these symbols represent?



$$6 \times \text{pineapple} = 24$$

$$\text{pineapple} \times \text{apple} = 32$$

$$\text{apple} \times \text{apple} = 64$$

$$\text{apple} \times \text{blackberries} = 24$$

$$\text{orange} \div \text{blackberries} = \text{pineapple}$$

$$\text{strawberry} \times \text{apple} = 40$$

2. Which fruit can't you work out from these facts?

# Find a Word!

## Rules

You can use each letter once only.

You cannot include proper nouns.

I	N	F	E
A	S	D	Y
L	U	P	R
V	W	H	O

## Points

3 letters = 1 point

4 letters = 1 point

5 letters = 2 points

6 letters = 3 points

7 letters = 5 points

8 letters = 9 points

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Challenge

Using the letters above, can you find:

a verb?

an adjective?

an adverb?

a common noun?



## What Am I?

Can you figure out the word, using the letters above to help you?

I am a six-letter word.

I am a verb.

I happen when you get cold or scared.

I am \_\_\_\_\_.



# Find a Word!

## Rules

You can use each letter once only.

You cannot include proper nouns.

A	I	Y	P
H	D	S	R
T	U	F	L
M	N	G	E

## Points

3 letters = 1 point

4 letters = 1 point

5 letters = 2 points

6 letters = 3 points

7 letters = 5 points

8 letters = 9 points

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
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- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Challenge

Using the letters above, can you find:

a verb?

an adjective?

an adverb?

a common noun?



## What Am I?

Can you figure out the word, using the letters above to help you?

I am an eight-letter word.

I am an adverb.

I am a desire or need for food.

I am \_\_\_\_\_.



# Multistep Word Problems

Complete these multi-step problems by selecting the correct operations to complete the calculations.

- 1) Six pencils cost £1.92. Three pencils and one rubber cost £1.21.  
What is the cost of one rubber?  
\_\_\_\_\_
  
- 2) A stack of 40 identical toy boxes is 1000cm tall. Markus takes three boxes off the top of the pile. How tall is the stack now?  
\_\_\_\_\_
  
- 3) Mrs Tunnicliffe is making jam to sell at the county fair. Blackberries cost £5.50 per kg. Sugar costs 65p per kg. 15 glass jars costs £5.85. She uses 16kg of blackberries and 10kg of sugar to make 15 jars of jam. Calculate the total cost to make 15 jars of jam.  
\_\_\_\_\_
  
- 4) A school orders 12 boxes of dice. Each box contains six bags of dice. Each bag contains 35 dice. How many dice do the school order in total?  
\_\_\_\_\_
  
- 5) Mikel thinks of a number. He multiplies the number by 100, divides it by eight then adds 6.50. The answer is 1206.5. What was his starting number?  
\_\_\_\_\_
  
- 6) Eight small bricks have the same mass as three large bricks. The mass of one small brick is 1.5kg. What is the mass of one large brick?  
\_\_\_\_\_



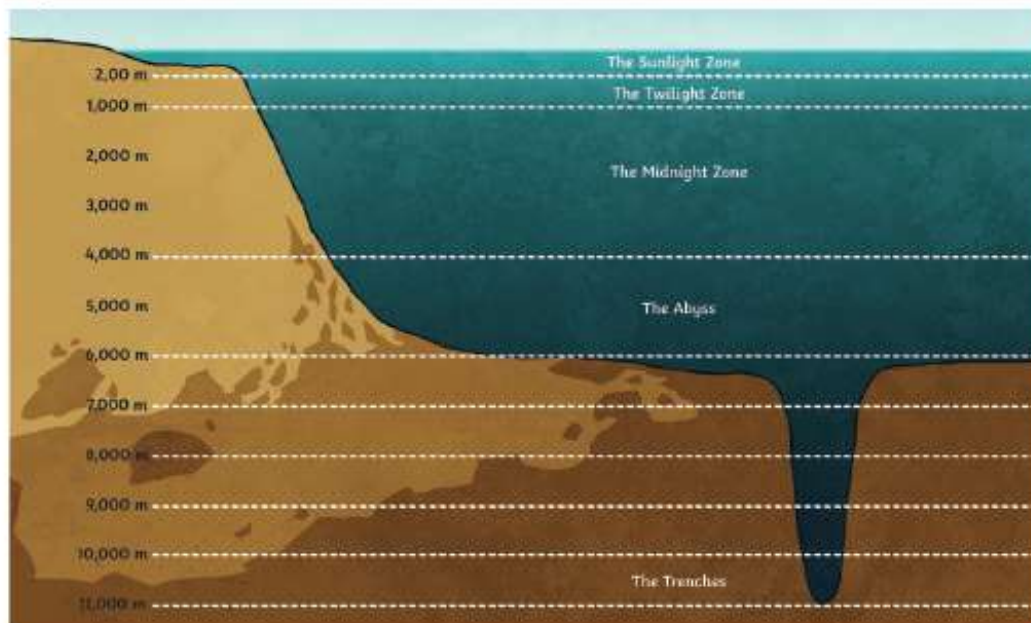


# Layers of the Ocean

Oceans cover two-thirds of our Earth. There are five main oceans which all flow into each other: the Arctic Ocean, the Atlantic Ocean, the Indian Ocean, the Pacific Ocean and the Southern or Antarctic Ocean.

## What Are the Layers of the Ocean?

Oceans are made of five layers or depths. Each layer has different characteristics, such as the temperature and the amount of light. They have unique creatures living within them.



## The Sunlight Zone – up to 200m below the surface of the ocean

There is plenty of sunlight and heat in this zone although both decrease as you go deeper. There are many different living things within this layer, including:



seaweed



dolphins



fish



coral reefs

Humans enjoy this warm layer for activities such as swimming and fishing.

### The Twilight Zone – up to 1,000m below the surface of the ocean

Only faint sunrays reach this deeper layer. No plants grow within this layer. It is home to sea animals which often have large eyes, including:

- the sea cucumber;
- the swordfish;
- the wolf eel;
- the octopus.

Humans can dive to this layer wearing protective suits.



### The Midnight Zone – up to 4,000m below the surface of the ocean

The Midnight Zone is pitch-black because sunlight cannot reach this layer. Some light can be seen from creatures that make their own light, such as:

- anglerfish;
- viperfish;
- jellyfish.

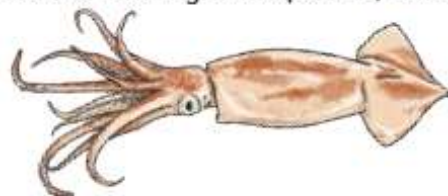


Some creatures, such as the sperm whale, dive to these depths to hunt for food.

### Abyss – up to 6,000m below the surface of the ocean

The sunlight cannot reach this layer at all so it is pitch-black and near freezing. Very few creatures live here but those that do are mainly transparent, blind invertebrates, such as:

- lanternfish;
- amphipod;
- squid



### The Trenches – up to 11,000m below the surface of the ocean

The Trenches are narrow, underwater valleys of the ocean floor which have high pressure and near-freezing temperatures. There is no natural light in this zone but different creatures can be found, such as sea stars.

#### Did You Know...?

The deepest part of the ocean ever to be explored by humans is the Mariana Trench. It is almost 11,000m deep! Specialist scientific equipment had to be used.



# Questions

1. How much of the Earth do oceans cover? Tick one.

- one-third
- two-thirds
- three-quarters
- half

2. Match each layer of the ocean to its depth below the surface.

Sunlight Zone	•	•	up to 11,000m
Midnight Zone	•	•	up to 4,000m
The Trenches	•	•	up to 200m

3. In the Sunlight Zone, what do humans enjoy doing? Tick **two**.

- diving
- fishing
- swimming
- warming up

4. Which of these is **not** a creature you might find in the Abyss? Tick one.

- sperm whale
- lanternfish
- amphipod
- squid

5. Fill in the missing words in this sentence:

The Trenches are narrow, underwater \_\_\_\_\_ of the ocean floor which have high \_\_\_\_\_ and near \_\_\_\_\_ temperatures.

6. Give **two** examples of creatures found in the Midnight Zone.

1. \_\_\_\_\_

2. \_\_\_\_\_

7. Which layer would you most like to visit? Give **two** reasons.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Writing

Write an adventure story about a sea creature. Use your imagination and have fun! Remember to use interesting **vocabulary**, **conjunctions** to join ideas, vary your **openers** and use a range of **punctuation** (including inverted commas when characters speak).

