Dear Customer,
Thank you for buying our KS2 Winter Challenges Package.
Each activity can be incorporated into a complete booklet using the front cover provided. Alternatively, each activity can be used separately according to your particular requirements.

After each activity you will find a related sheet providing you with the answers in order to facilitate speed of marking.



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## And here is the weather forecast

Today - Wales and South West England, a foggy start with visibility down to 50 metres in places. After lunch, there will be sunny spells with temperatures rising to $20^{\circ}\left(22^{\circ}\right.$ in West Wales). Winds will be light (15/20 m.p.h.) from the South West. By evening there is a chance of isolated showers.

Outlook for tomorrow - sunny spells and scattered showers.

## Today - Southern England, Eastern England, The Midlands and Northern England,

 A frosty start with icy patches on some roads, temperatures will rise from $1^{\circ}$ to a maximum of $5^{\circ}$, strong winds (40-50 mph) will reach North West England causing rough seas. Rain, heavy at times $(10 \mathrm{~mm})$ will spread from the West.Outlook for tomorrow - staying cold, wet and windy.
Today - Scotland (Amber weather warning!).
Snow at first with strong gales (50-60 mph) causing snow to drift on high ground, temperatures only reaching $5^{\circ}$. In the evening temperatures will drop to $-2^{\circ}$ with icy roads and more snow (15-20 cms).

Outlook for tomorrow - staying cold, especially in Northern Scotland, more snow likely but winds will drop to 20 mph .

Can you use the weather forecast to answer these questions about the weather today?

| 1. Which parts of the UK will have a foggy start? |  |
| :--- | :--- |
| 2. What is the outlook for tomorrow in Wales and <br> South West England? |  |
| 3. Where will be the warmest part of Wales and South <br> West England? |  |
| 4. By how many degrees will the temperature rise in <br> Eastern England ? |  |
| 5. How much rain will fall in Northern England? |  |
| 6. By how much will the temperatures fall in Scotland? |  |
| 7. Which area has an Amber weather warning ? |  |
| 8. Who might be worried about the state of the sea in |  |
| North west England? |  |
| 9. Which area might be best for sledging? |  |
| 10. What is the outlook for tomorrow in The Midlands? |  |

## And here is the weather forecast (Answers)

Today - Wales and South West England, a foggy start with visibility down to 50 metres in places. After lunch, there will be sunny spells with temperatures rising to $20^{\circ}\left(22^{\circ}\right.$ in West Wales). Winds will be light ( $15 / 20 \mathrm{~m}$. p.h.) from the South West. By evening there is a chance of isolated showers.

Outlook for tomorrow - sunny spells and scattered showers.

## Today - Southern England, Eastern England, The Midlands and Northern England,

 A frosty start with icy patches on some roads, temperatures will rise from $1^{\circ}$ to a maximum of $5^{\circ}$, strong winds ( $40-50 \mathrm{mph}$ ) will reach North West England causing rough seas. Rain, heavy at times ( 10 mm ) will spread from the West.Outlook for tomorrow - staying cold, wet and windy.
Today - Scotland (Amber weather warning!).
Snow at first with strong gales ( $50-60 \mathrm{mph}$ ) causing snow to drift on high ground, temperatures only reaching $5^{\circ}$. In the evening temperatures will drop to $-2^{\circ}$ with icy roads and more snow ( $15-20 \mathrm{cms}$ ).

Outlook for tomorrow - staying cold, especially in Northern Scotland, more snow likely but winds will drop to 20 mph .

Can you use the weather forecast to answer these questions about the weather today?

| 1. Which parts of the UK will have a foggy start? | Wales and South West England |
| :--- | :---: |
| 2. What is the outlook for tomorrow in Wales and <br> South West England? | Sunny spells and scattered showers |
| 3. Where will be the warmest part of Wales and South <br> West England? | West Wales |
| 4. By how many degrees will the temperature rise in <br> Eastern England ? | $4^{\circ}$ |
| 5. How much rain will fall in Northern England? | 10 mm |
| 6. By how much will the temperatures fall in Scotland? | $7^{\circ}$ |
| 7. Which area has an Amber weather warning ? | Scotland |
| 8. Who might be worried about the state of the sea in <br> North west England? | Sailors and fishermen |
| 9. Which area might be best for sledging? | Scotland |
| 10. What is the outlook for tomorrow in The Midlands? | Staying cold, wet and windy |

## Hours of Daylight

Once we are in January, the sun begins to rise a little earlier and sets a little later each day giving us longer hours of daylight.
Can you use this chart to answer the questions?

| Date | Sunrise | Sunset | Hours of daylight |
| :---: | :---: | :---: | :---: |
| Friday 01/01/16 | 8:06 | 16:02 | 7 hours 56 minutes |
| 02/01/16 | 8:06 | 16:03 | 7h 57m |
| 03/01/16 | 8:06 | 16:04 | 7h 58m |
| 04/01/16 | 8:06 | 16:05 | 7h 59m |
| 05/01/16 | 8:06 | 16:07 | 8h 1m |
| 06/01/16 | 8:05 | 16:08 | 8h 3m |
| 07/01/16 | 8:05 | 16:09 | 8h 4m |
| 08/01/16 | 8:04 | 16:10 | 8h 6m |
| 09/01/16 | 8:04 | 16:12 | 8h 8m |
| 10/01/16 | 8:03 | 16:13 | 8h 10 m |
| 11/01/16 | 8:03 | 16:15 | 8h 12 m |
| 12/01/16 | 8:02 | 16:16 | 8h 14m |
| 13/01/16 | 8:02 | 16:17 | 8h 15m |
| 14/01/16 | 8:01 | 16:19 | 8h 18m |
| 15/01/16 | 8:00 | 16:21 | 8h 21m |
| 16/01/16 | 7:59 | 16:22 | 8h 23 m |
| 17/01/16 | 7:58 | 16:24 | 8h 26 m |
| 18/01/16 | 7:57 | 16:25 | 8h 28 m |
| 19/01/16 | 7:56 | 16:27 | 8h 31m |
| 20/01/16 | 7:55 | 16:29 | 8h 34m |
| 21/01/16 | 7:54 | 16:30 | 8h 36m |
| 22/01/16 | 7:53 | 16:32 | 8h 39m |
| 23/01/16 | 7:52 | 16:34 | 8h 42m |
| 24/01/16 | 7:51 | 16:35 | 8h 44m |
| 25/01/16 | 7:49 | 16:37 | 8h 48m |
| 26/01/16 | 7:48 | 16:39 | 8h 51m |
| 27/01/16 | 7:47 | 16:41 | 8h 54 m |
| 28/01/16 | 7:45 | 16:42 | 8h 57m |
| 29/01/16 | 7:44 | 16:44 | 9h 0m |
| 30/01/16 | 7:43 | 16:46 | 9h 3m |
| 31/01/16 | 7:41 | 16:48 | 9h 7m |

1. On which day are there exactly 9 hours of sunlight?
2. If the 1st of January is a Friday, what day of the week will the 8th of January be?
3. What time does the sun rise on the 27th of January?
4. What time does they sun set on the 24th January?
$\square$
5. How many hours and minutes of daylight are there on the 9th January?
6. How many more hours and minutes of daylight are there on the 31st January than on the 1st January?
7. If this pattern continues through February (29 days in February this year), can you estimate how many hours of daylight there will be at the end of February?
$\square$
8. What day of the week is the 22nd of January?
9. What day of the week was 31st December?
10. On what date does the sun rise at exactly $8: 00$ ?
11. On which day are there exactly 9 hours of sunlight?

### 29.01.2016

2. If the 1st of January is a Friday, what day of the week will the 8th of January be?

Friday
3. What time does the sun rise on the 27th of January?
4. What time does they sun set on the 24th January?

16:35
5. How many hours and minutes of daylight are there on the 9th January?

8 hours, 8 minutes
6. How many more hours and minutes of daylight are there on the 31st January than on the 1st January?

1 hours, 11 minutes
7. If this pattern continues through February ( 29 days in February this year), can you estimate how many hours of daylight there will be at the end of February?

Approx. 10 hours
8. What day of the week is the 22 nd of January?

Friday
9. What day of the week was 31st December?

Thursday
10. On what date does the sun rise at exactly $8: 00$ ?

## Minus Temperatures

In winter temperatures fall, sometimes below $0^{\circ} \mathrm{C}$ (Celsius) but it can get even colder than that. When temperatures go below $0^{\circ}$, they becomes minus degrees (or degrees below 0 ).

Can you work out these calculations based on minus numbers (sometimes called negative numbers).

| Questions | Answers |
| :--- | :--- |
| 1. If the temperature was $5^{\circ}$ and it fell $6^{\circ}$, what would the temperature be? |  |
| 2. If the temperature was $4^{\circ}$ and it fell $7^{\circ}$, what would the temperature be? |  |
| 3. If the temperature was $10^{\circ}$ and it fell $13^{\circ}$, what would the temperature be? |  |
| 4. If the temperature was $6^{\circ}$ and it fell $10^{\circ}$, what would the temperature be? |  |
| 5. If the temperature was $2^{\circ}$ and it fell $7^{\circ}$, what would the temperature be? |  |
| 6. If the temperature was $-2^{\circ}$ and it rose by $5^{\circ}$, what would the temperature be? |  |
| 7. If the temperature was $-6^{\circ}$ and it rose by $7^{\circ}$, what would the temperature be? |  |
| 8. If the temperature was $-1^{\circ}$ and it rose by $2^{\circ}$, what would the temperature be? |  |
| 9. If the temperature was $-1^{\circ}$ and it rose by $3^{\circ}$, what would the temperature be? |  |
| 10. If the temperature was $-3^{\circ}$ and it rose by $5^{\circ}$ and then fell again by $8^{\circ}$, what would |  |
| the temperature be? |  |

When snow falls it can lie quite deeply. When it is then blown by the wind, it can cause snow drifts, these can be up to 2 metres high. If 10 cm of snow falls, when it melts there will be only 1 cm of water, this is a ratio of $10: 1$ ( 10 cms of snow $=1 \mathrm{~cm}$ of water).

Can you work out the answers to these questions?

| Questions | Answers |
| :--- | :--- |
| 1. If 20 cms of snow falls, how much water will be produced when the snow melts? |  |
| 2. If 30 cms of snow falls, how much water will be produced when the snow melts? |  |
| 3. If 15 cms of snow falls, how much water will be produced when the snow melts? |  |
| 4. If 1 cm of water is produced from melted snow, how much snow fell? |  |
| 5. If 2.5 cm of water is produced from melted snow, how much snow fell? |  |

## Minus Temperatures (Answers)

In winter temperatures fall, sometimes below $0^{\circ} \mathrm{C}$ (Celsius) but it can get even colder than that. When temperatures go below $0^{\circ}$, they becomes minus degrees (or degrees below 0 ).

Can you work out these calculations based on minus numbers (sometimes called negative numbers).

| Questions | Answers |
| :--- | :---: |
| 1. If the temperature was $5^{\circ}$ and it fell $6^{\circ}$, what would the temperature be? | $-1^{\circ}$ |
| 2. If the temperature was $4^{\circ}$ and it fell $7^{\circ}$, what would the temperature be? | $-3^{\circ}$ |
| 3. If the temperature was $10^{\circ}$ and it fell $13^{\circ}$, what would the temperature be? | $-3^{\circ}$ |
| 4. If the temperature was $6^{\circ}$ and it fell $10^{\circ}$, what would the temperature be? | $-4^{\circ}$ |
| 5. If the temperature was $2^{\circ}$ and it fell $7^{\circ}$, what would the temperature be? | $-5^{\circ}$ |
| 6. If the temperature was $-2^{\circ}$ and it rose by $5^{\circ}$, what would the temperature be? | $3^{\circ}$ |
| 7. If the temperature was $-6^{\circ}$ and it rose by $7^{\circ}$, what would the temperature be? | $1^{\circ}$ |
| 8. If the temperature was $-1^{\circ}$ and it rose by $2^{\circ}$, what would the temperature be? | $1^{\circ}$ |
| 9. If the temperature was $-1^{\circ}$ and it rose by $3^{\circ}$, what would the temperature be? | $-7^{\circ}$ |
| 10. If the temperature was $-3^{\circ}$ and it rose by $5^{\circ}$ and then fell again by $8^{\circ}$, what would <br> the temperature be? | $-6^{\circ}$ |

When snow falls it can lie quite deeply. When it is then blown by the wind, it can cause snow drifts, these can be up to 2 metres high. If 10 cm of snow falls, when it melts there will be only 1 cm of water, this is a ratio of $10: 1$ ( 10 cms of snow $=1 \mathrm{~cm}$ of water).

Can you work out the answers to these questions?

| Questions | Answers |
| :--- | :---: |
| 1. If 20 cms of snow falls, how much water will be produced when the snow melts? | 2 cm |
| 2. If 30 cms of snow falls, how much water will be produced when the snow melts? | 3 cm |
| 3. If 15 cms of snow falls, how much water will be produced when the snow melts? | 1.5 cm |
| 4. If 1 cm of water is produced from melted snow, how much snow fell? | 10 cm |
| 5. If 2.5 cm of water is produced from melted snow, how much snow fell? | 25 cm |

## Sledges-R-us (interpreting data)

Winter is a time for playing out in the snow but you might need to buy a new sledge. Luckily, Sledges-R-us is open for business and as you can see from the table below, there are some great offers (except The Orcieres which has had a price rise).

| Model | Original price | Price change |
| :--- | :---: | :---: |
| The St. Moritz | $£ 50$ | $-10 \%$ |
| The Meribel | $£ 60$ | $-10 \%$ |
| The Momtalbert | $£ 100$ | $-12 \%$ |
| The Risoul | $£ 120$ | HALF PRICE |
| The Sainte Foy | $£ 111$ | $£ 15$ off! |
| The Tignes | $£ 72$ | $£ 14$ off! |
| The Val Thorens | $£ 90$ | Buy one, Get one FREE |
| The Val d'Isere | $£ 80$ | $-50 \%$ |
| The Reberty | $£ 90$ | $1 / 3$ off! |
| The Orcieres | $£ 60$ | $+10 \%$ |

Use the information from the table to answer the questions below?

| Questions | Answers |
| :--- | :--- |
| 1. What is the new price of The St. Moritz? |  |
| 2. What is the new price of The Meribel? |  |
| 3, What is the new price of The Momtalbert? |  |
| 4, What is the new price of The Risoul? |  |
| 5, What is the new price of The Sainte Foy? |  |
| 6, What is the new price of The Tignes? |  |
| 7, If The Val Thorens is Buy one-Get one free, how much does that make it per sledge? |  |
| 8, What is the new price of The Val d'Isere? |  |
| 9, What is the new price of The Reberty? |  |
| 10, what is the new price of The Orcieres? |  |
| 11, Which is the cheapest sledge? |  |
| 12, Which is the most expensive sledge? |  |

## EXTENSION ACTIVITY

Sadly, there has been a bit of a mix-up at Sledges-R-us and somebody has forgotten to add pictures to the various models of sledges. Can you help them out by adding your own pictures of what you think each sledge might look like?

You can use your imagination; might they have Sat-Nav? Roofs? Fancy colour scheme? How many seats?

Have some fun!

| The St. Moritz | The Meribel | The Momtalbert |
| :--- | :--- | :--- |
| The Risoul | The Sainte Foy | The Tignes |
| The Val Thorens |  |  |

The Orcieres

Here's something else for you to think about:
can you find out where Sledges-R-us got the names of their sledges from?

## Sledges-R-us (answers)

| Questions | Answers |
| :---: | :---: |
| 1. What is the new price of The St. Moritz? | £45 |
| 2. What is the new price of The Meribel? | $£ 54$ |
| 3, What is the new price of The Momtalbert? | £88 |
| 4, What is the new price of The Risoul? | £60 |
| 5, What is the new price of The Sainte Foy? | £96 |
| 6, What is the new price of The Tignes? | $£ 58$ |
| 7, If The Val Thorens is Buy one - Get one free, how much does that make it per sledge? | £45 |
| 8, What is the new price of The Val d'Isere? | £60 |
| 9, What is the new price of The Reberty? | £60 |
| 10, what is the new price of The Orcieres? | £66 |
| 11, Which is the cheapest sledge? The Vald | The Val d'Isere |
| 12, Which is the most expensive sledge? The Mo | The Momtalbert |

Sledges-R-us got the names of their sledges from French ski resorts.

## Winter Word Smuggling

Read the sentences below. Hidden in each sentence is one of the words from the bottom of the page. Can you find each of the hidden words.

The first one has been done for you.

| 1. Rome and Carlisle; eternal cities. | sleet |
| :--- | :--- |
| 2. "Take off those shoes now!" shouted Grumpy Gran. |  |
| 3. The magical wood was filled with enchanted creatures, <br> a wizard, an elf, ogres and fairies. |  |
| 4. "As you get older, you should show independence and |  |
| responsibility." said the head teacher in assembly. |  |
| 5. Suzie shouted to her brother, "Stop pushing, Alex!". |  |
| 6. In the dodgem Ali asked his sister if she wanted to go <br> fast or medium speed. |  |
| 7. The dance teacher said, "That was fantastic Ellie, well |  |
| done!". |  |
| 8. Carved in to the tree was a message, "Reg loves Edna |  |
| $x x x x^{\prime}$. | sog |

## Winter Word Smuggling (answers)

Read the sentences below. Hidden in each sentence is one of the words from the bottom of the page. Can you find each of the hidden words.

The first one has been done for you.

| 1. Rome and Carlisle; eternal cities. | sleet |
| :--- | :---: |
| 2. "Take off those shoes now!" shouted Grumpy Gran. | snow |
| 3. The magical wood was filled with enchanted creatures, <br> a wizard, an elf, ogres and fairies. | fog |
| 4. "As you get older, you should show independence and <br> responsibility." said the head teacher in assembly. | wind |
| 5. Suzie shouted to her brother, "Stop pushing, Alex!". | gale |
| 6. In the dodgem Ali asked his sister if she wanted to go <br> fast or medium speed. | storm |
| 7. The dance teacher said, "That was fantastic Ellie, well <br> done!". | ice |
| 8. Carved in to the tree was a message, "Reg loves Edna <br> xxxx". | gloves |
| 9. Uncle Joe's car flew down the road. | scarf |
| 10. You must ask a teacher when you don't understand. | skate |
| gale |  |
| scarf | storm |
| skate | fog |

The Diary of a Snowman - read and answer the questions on the next page

| Time | What happened | Time | What happened |
| :---: | :---: | :---: | :---: |
| 8:00 | It's been snowing all night and it's laying in the garden, 12 cm deep! | 10:15 | Mum calls the children in again to change their damp, cold gloves but while they're changing... DISASTER! |
|  | From inside the house, I can hear excited children's voices and the sound of Ben and Charlotte getting their scarves, gloves, hats and boots on. |  |  |
| 8:15 |  | 10:17 | That horrible boy Toby from next door has thrown a snowball at my head and knocked it off! I'm in pieces! |
| 8:20 | Here they come! | 10:20 | The children rush back out of the house, see what's happened and immediately start making me a new head. Splendid! Toby has gone back indoors to play on his computer, good job! |
| 8:25 | They're playing snowballs! That's no use to me!!! |  |  |
| 8:50 | Charlotte has thrown a snowball at Ben and it's gone right down the back |  |  |
|  | of his neck, he's upset and has gone inside to get dry. Bother! | 10:30 | That's wonderful, the new head is even better than the last and it's been fixed on even more firmly. I'm becoming a happy, robust snowman. |
| 9:05 | Here they come again and YES they decide to make a snowman, at last! |  |  |
| 9:20 | This is going well, the snow is good, crispy and firm and Charlotte and Ben are busy rolling two giant snowballs, one for my body, Ben, and one for my head, Charlotte. | 10:40 | Mum comes out to take a few pictures and then all three of them disappear inside, they can't leave me like this surely? |
|  |  | 11:00 | No sign of them coming back. |
| 9:35 | Great, here they come out again. Let's get me done! | 11:20 | Still no sign! |
|  |  |  | Here they are again at last and look |
| 9:45 | The two giant snowballs are getting to be a good size, Ben's is certainly big enough to be my body and Charlotte's is just about perfect for my head. | 11:40 | what they've got! The kit, the finishing kit. They've got it all- a hat, a scarf, two bits of coal and a big, bright orange carrot. That's more like it! |
|  |  | 11:50 | Ben and Charlotte have assembled me to perfection, a furry old hat of Mum's, an old, stripy scarf of Granddad's, two shiny bits of coal for my eyes and that magnificent carrot for my nose. I am a happy man, a happy snowman. A splendid traditional, hand- made, lovingly assembled snowman! |
| 9:55 | Time to assemble me! The children carefully lift the smaller ball and, taking a great deal of care, delicately place it on top of the larger snowball. Ta-daa! I'm beginning to feel like I'm becoming a proper snowman! |  |  |

## Can you answer these questions based on 'The Diary of a Snowman'.

1. How deep was the snow in the garden?
$\square$
2. At what time did the children go in after Ben had got a snowball down his back?
$\square$
3. Why did Charlotte and Ben go inside at 9:20?
$\square$
4. Who threw the snowball that knocked the head off the snowman?
$\square$
5. Who made the large snowball that made the snowman's body?
$\square$
6. Whose scarf was used for the snowman?
$\square$
7. At $10: 40$ Mum calls the children in, how many minutes later do they come out?
$\square$
8. What three adjectives does the snowman use to describe the snow?
9. At $10: 30$ the snowman uses the word 'robust', can you think of another word he might use with the same meaning?
$\square$
10. What did the children use for the snowman's nose?
$\square$
This is really only half the story. As time goes by the snowman will sadly begin to melt and disappear. Can you use the same framework to finish off the story? How will he feel as he begins to disappear? What will he think about the children? Will he have any more adventures? Try and use the same style as the snowman.

## Can you answer these questions based on 'The Diary of a Snowman'. (Answers)

1. How deep was the snow in the garden?

12 cm
2. At what time did the children go in after Ben had got a snowball down his back?

8:50
3. Why did Charlotte and Ben go inside at 9:20?

To change their damp, cold gloves.
4. Who threw the snowball that knocked the head off the snowman?

## Toby

5. Who made the large snowball that made the snowman's body?

## Ben

6. Whose scarf was used for the snowman?

## Granddad's

7. At $10: 40$ Mum calls the children in, how many minutes later do they come out?

## 60 minutes

8. What three adjectives does the snowman use to describe the snow?

Good, crisp and firm
9. At 10:30 the snowman uses the word 'robust', can you think of another word he might use with the same meaning?

Solid, strong, rigid (or words with a similar meaning).
10. What did the children use for the snowman's nose?

## A magnificent carrot

This is really only half the story. As time goes by the snowman will sadly begin to melt and disappear. Can you use the same framework to finish off the story? How will he feel as he begins to disappear? What will he think about the children? Will he have any more adventures? Try and use the same style as the snowman.

## Storms and Severe Weather

In December of 2015, much of the UK suffered from bad storms which caused a lot of rain and led to much flooding. Many people's houses were flooded causing much damage and heartbreak. The Lake District, Western Scotland and parts of Yorkshire (especially York and Leeds) suffered much damage as rivers rose and houses and streets were flooded. When The Meteorological Office (weather forecasters) think that there is a danger of severe weather, they issue a 'Weather Warning'. There are three levels of warning, they are:-

Yellow - Be aware. There is a chance that there will be severe weather (rain, snow, ice, wind or fog) in the next few days. You should plan your journeys carefully and keep an eye on forecasts over the next few days.

Amber - Be prepared. This means that there is a likelihood of severe weather and you need to be prepared to change your plans to protect your property and yourselves.

Red - Take action. This means that extreme and dangerous weather is expected and you must take action to stay safe. Widespread damage, power disruption and risk to life is likely.

The Met Office has started to give these winter storms names. Up to January 2016, we have had 6 storms this winter. They have been called:

1. Abigail
2. Desmond
3. Barney
4. Eva
5. Clodagh
6. Frank

Can you answer these questions:

1. Name two regions of the UK affected by winter storms.
2. Name two cities affected by the floods.
3. What are the three levels of weather warnings?
4. Which level of warning suggests you should 'Be prepared'?
5. What was the name of the third storm of the winter?
6. The names of the storms follow a pattern (or two), can you see what it is? Can you suggest possible names for the next ten storms?

## Storms and Severe Weather (Answers)

In December of 2015, much of the UK suffered from bad storms which caused a lot of rain and led to much flooding. Many people's houses were flooded causing much damage and heartbreak.

The Lake District, Western Scotland and parts of Yorkshire (especially York and Leeds) suffered much damage as rivers rose and houses and streets were flooded. When The Meteorological Office (weather forecasters) think that there is a danger of severe weather, they issue a 'Weather Warning'. There are three levels of warning, they are:-

Yellow - Be aware. There is a chance that there will be severe weather (rain, snow, ice, wind or fog) in the next few days. You should plan your journeys carefully and keep an eye on forecasts over the next few days.

Amber - Be prepared. This means that there is a likelihood of severe weather and you need to be prepared to change your plans to protect your property and yourselves.

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1. Abigail
2. Desmond
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4. Eva
5. Clodagh
6. Frank

Can you answer these questions:

1. Name two regions of the UK affected by winter storms.

Lake District/Western Scotland/parts of Yorkshire
2. Name two cities affected by the floods.

York and Leeds
3. What are the three levels of weather warnings?

Yellow, Amber and Red
4. Which level of warning suggests you should 'Be prepared'?

Amber
5. What was the name of the third storm of the winter?

## Clodagh

6. The names of the storms follow a pattern (or two), can you see what it is? Can you suggest possible names for the next ten storms?
Alternate girl/boy names beginning with capital GHIJKLMNOP
Here are some weather reports for the UK
Here is some data from cities around the world:

| City | Temperature | Weather |
| :--- | :---: | :---: |
| Abu Dhabi - United Arab Emirates | 22 | S |
| Beijing - China | 0 | S |
| Delhi - India | 23 | S |
| Helsinki - Finland | -19 | C |
| Johannesburg - South Africa | 28 | S |
| Moscow - Russia | -18 | SN |
| Rio - Brazil | 28 | F |
| Sydney - Australia | 19 | R |


| Weather Key |  |
| :---: | :--- |
| $C$ | Cloudy |
| DR | Drizzle |
| F | Fog |
| R | Rain |
| S | Sunny |
| SH | Showers |
| SN | Snow |

Use the data from the tables to answer these questions about weather in the U.K. and the world (Good luck!).

| Questions | Answers |
| :--- | :--- |
| 1. What was the temperature in Aberdeen? |  |
| 2. How much rain was there in Oxford? |  |
| 3. Which city had the most sun? |  |
| 4. Where was it drizzling? |  |
| 5. Where was there 4mm of rain? |  |
| 6. Where was the warmest city? |  |
| 7. In which 2 U.K. cities were there showers? |  |
| 8. What was the total rainfall for all cities in the U.K. that begin with a B? |  |
| 9. What was the difference in degrees between the city with the highest temperature and |  |
| the city with the lowest temperature? |  |
| 10. Name two cities that had no sun? |  |

These questions are about cities around the world
11. Where was it snowing?
12. Which was the hottest city?
13. Which was the coldest city?
14. What was the temperature in China's capital?
15. Where was it foggy?
Answers

1. What was the temperature in Aberdeen?

## 2. How much rain was there in Oxford?

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## Warming Winter Food (Comprehension)

When the weather is cold, it is important that we all eat healthy, warming food. Soup is a great way to do this; it's cheap, easy to make and very tasty.

Here is a recipe for a hearty winter soup.

## Leek and Potato Soup

## Ingredients

| 50 g butter | 1 litre chicken stock |
| :--- | :--- |
| 450 g potatoes | 150 ml whipping cream |
| 1 small onion | 120 ml milk |
| 450 g leeks | 100 g grated cheese |

This is what you do (method)

1. Melt the butter in a heavy bottomed pan. When it melts, stir in the cubed potatoes, the chopped onion and the sliced leeks. Cook gently for 10 minutes with a lid on until the vegetables begin to get soft.
2. Add the stock and simmer (lightly boil) for $5 / 10$ minutes until the vegetables are cooked.
3. Use a blender or potato masher to make the soup smooth and not lumpy. Warm the soup through and add the milk and the cream. When the soup is nice and hot, pour into bowls and add some grated cheese on the top.

| Questions | Answers |
| :--- | :--- |
| 1. What is the combined weight of the leeks and potatoes? |  |
| 2. If you added up the quantities of milk, stock and cream what would the <br> volume be? |  |
| 3. There is twice the weight of cheese as which other ingredient? |  |
| 4. If it takes 10 minutes to prepare the vegetables, roughly how long do you <br> think the soup will take to make? |  |
| 5. This recipe is meant to be enough for 8 people, how much butter, cheese <br> and milk would you need to make the soup for 4 people (half)? |  |
| 6. What word is used in recipes for the food that you will need to make <br> something? |  |
| 7. What word is used in recipes for the stages of what you have to do to <br> make something? |  |

## Warming Winter Food (Answers)

When the weather is cold, it is important that we all eat healthy, warming food. Soup is a great way to do this; it's cheap, easy to make and very tasty.

Here is a recipe for a hearty winter soup.

## Leek and Potato Soup

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| Questions | Answers |
| :--- | :---: |
| 1. What is the combined weight of the leeks and potatoes? | 900 g |
| 2. If you added up the quantities of milk, stock and cream what would the <br> volume be? | 1 L 270 ML |
| 3. There is twice the weight of cheese as which other ingredient? | Butter |
| 4. If it takes 10 minutes to prepare the vegetables, roughly how long do you <br> think the soup will take to make? | 30 min (approx.) |
| 5. This recipe is meant to be enough for 8 people, how much butter, cheese <br> and milk would you need to make the soup for 4 people (half)? | 25 g butter, 50 g |
| 6. What word is used in recipes for the food that you will need to make <br> something? | Ingredients |
| 7. What word is used in recipes for the stages of what you have to do to <br> make something? | Method |



ACROSS CLUES

DOWN CLUES

1. Warm and waterproof, these keep your hands 1. To move around on frozen water with
dry. (6)
2. Icy rain, like wet snow. (5)
3. Flakes of frozen rain. (4)
metal-bladed shoes. (5)
4. Footwear for cold, wet weather. (5)
5. A single piece of frozen water that falls from the sky on cold days. (9)
6. To move down snowy hills using specially made long wooden shoes. (3)
7. What happens to ice and snow when the temperature rises and they change to water. (4)
8. Made from snow to resemble a person (7)
9. A way of going down hills in winter, often made from wood with metal runners. (6)

## Winter Crossword (Answers)



1. Warm and waterproof, these keep your hands 1. To move around on frozen water with
dry. (6) Gloves
2. Icy rain, like wet snow. (5) Sleet
3. Flakes of frozen rain. (4) Snow
metal-bladed shoes. (5) Skate
4. Footwear for cold, wet weather. (5) Boots
5. A single piece of frozen water that falls from the sky on cold days. (9) Snowflake
6. To move down snowy hills using specially made long wooden shoes. (3) Ski
7. What happens to ice and snow when the temperature rises and they change to water. (4) Thaw
8. Made from snow to resemble a person (7) Snowman
9. A way of going down hills in winter, often made from wood with metal runners. (6) Sledge

## Winter Word Chain

| $F$ | $L$ | $A$ | $S$ | $T$ | $O$ | $R$ | $S$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $E$ | $L$ | $K$ | $G$ | $O$ | $F$ | $M$ | $E$ |
| $E$ | $S$ | $E$ | $N$ | $D$ | $S$ | $D$ | $L$ |
| $T$ | $E$ | $W$ | $I$ | $F$ | $I$ | $R$ | $A$ |
| S | C | I | F | T | T | W | G |
| N | O | W | R | O | S | E | T |

Look at the grid above. In it there are 11 winter weather words which have been put into a chain.

Starting with the $F$ in the shaded top left hand corner and finishing with the shaded $S$ in the top right hand corner, can you link these words, horizontally and vertically?

The words are below and all in order.
FLAKE
SLEET
SNOW
ICE
WINDS
FOG
STORM
DRIFT
FROST
WET
GALES

| $F$ | $L$ | $A$ | $S$ | $T$ | $O$ | $R$ | $S$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $E$ | $L$ | $K$ | $G$ | $O$ | $F$ | $M$ | $E$ |
| $E$ | $S$ | $E$ | $R$ | $D$ | $S$ | $D$ | $L$ |
| $T$ | $E$ | $W$ | $I$ | $F$ | $I$ | $R$ | $A$ |
| $S$ | $C$ | $I$ | $F$ | $T$ | $T$ | $W$ | $G$ |
| $N$ | $O$ | $W$ | $R$ | $O$ | $S$ | $E$ | $T$ |

Look at the grid above. In it there are 11 winter weather words which have been put into a chain.

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The words are below and all in order.
FLAKE
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ICE
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FOG
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DRIFT
FROST
WET
GALES

Winter Word Search

| Y | W | G | I | S | L | J | F | F | N | E | Z | M | W | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | Z | U | A | H | L | T | C | R | L | G | F | L | Q | A |
| D | H | R | Q | K | C | E | K | O | C | D | E | S | G | W |
| H | M | X | I | W | D | Z | E | S | G | E | T | H | A | W |
| S | N | F | R | E | E | Z | E | T | W | L | W | W | H | R |
| O | T | A | A | R | X | C | V | X | O | S | L | D | A | C |
| E | B | O | M | F | R | A | C | S | N | O | L | J | T | V |
| X | R | E | O | W | J | X | S | L | S | O | C | G | O | Z |
| I | I | H | K | B | O | E | K | K | C | J | D | R | A | C |
| U | L | C | Y | E | V | N | I | K | J | D | R | U | S | U |
| K | S | S | E | O | H | K | S | H | C | U | Z | K | O | T |
| X | Z | A | L | A | F | Z | K | Z | I | X | A | I | T | R |
| V | N | G | C | Y | N | J | D | K | O | T | G | P | U | G |
| E | K | A | L | F | W | O | N | S | E | T | Z | L | K | N |
|  | S | W | O | J | C | I | M | C | N | L | F | R | T |  |

Can you find these winter words in the word search?

| BOOTS | COLD | FREEZE |  |
| :---: | :---: | :---: | :---: |
| FROST | GLOVES | HAT |  |
| ICE | SCARF | SKATE |  |
| SKI | SLEDGE | SLEET |  |
| SNOW | SNOWFLAKE | SNOWMAN |  |
| THAW |  |  |  |
|  |  |  |  |

Winter Word Search (Answers)

| Y | W | G | I | S | L | J | F | F | N | E | Z | M | W | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | Z | U | A | H | L | T | C | R | L | G | F | L | Q | A |
| D | H | R | Q | K | C | E | K | O | C | D | E | S | G | W |
| H | M | X | I | W | D | Z | E | S | G | E | T | H | A | W |
| S | N | F | R | E | E | Z | E | T | W | L | W | W | H | R |
| O | T | A | A | R | X | C | V | X | O | S | L | D | A | C |
| E | B | O | M | F | R | A | C | S | N | O | L | J | T | V |
| X | R | E | O | W | J | X | S | L | S | O | C | G | O | Z |
| I | I | H | K | B | O | E | K | K | C | J | D | R | A | C |
| U | L | C | Y | E | V | N | I | K | J | D | R | U | S | U |
| K | S | S | E | O | H | K | S | H | C | U | Z | K | O | T |
| X | Z | A | L | A | F | Z | K | Z | I | X | A | I | T | R |
| V | N | G | C | Y | N | J | D | K | O | T | G | P | U | G |
| E | K | A | L | F | W | O | N | S | E | T | Z | L | K | N |
| S | W | O | J | C | I | M | C | N | L | F | R | T |  |  |

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| ICE | SCARF | SKATE |  |
| SKI | SLEDGE | SLEET |  |
| SNOW | SNOWFLAKE | SNOWMAN |  |
| THAW |  |  |  |
|  |  |  |  |

