

WEATHER

Teaching notes

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UNIT 1: WEATHER INFORMATION**LESSON 1****DEVELOPMENT****Introduction**

Use the Power Point presentation to show five pictures of different landscapes (slides 2–12). Tell the children to write in small boards what the weather is like in each photograph. Give them time to think and show then the correct answer by using the Power Point presentation (each picture can be related to a weather icon or symbol).

Activity 1

Show a photograph of a weather station (see power point images) and ask the students about it:

- *What's this?*
- *What's it for?*

Share different answers and explain that we call it a *weather station* and that it is used to report weather information in their home town. Locate their town in a Catalan map by using North, South, East and West directions (these terms were worked in previous years).

Show a UK map with the name of its most important cities (slide 27). Divide the students in groups of 3 or 4 and give each group a set of cards with the names of the cities that appear on the cards. Tell them to put the cards face down in a pile and take turns to turn over a card and make a sentence to locate each city. They can use the "Directions sheet" to put the cities in the four boxes.

London Plymouth Edinburgh Bristol	is in the	North South Centre East West	of the UK
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Finish the activity by asking a few students about some of the cities:

- *Where is*?

Activity 2

Students work in pairs and each partner has a different copy of the Activity sheet 1 (A or B). Each sheet has 2 maps (Catalonia and the UK). The maps have some weather information but students have to find out what is missing in each map by asking their partner.

STUDENT 1	What's the weather like in the	North South East West	of the UK? of Catalonia?
STUDENT 2	It is	cloudy sunny raining ...	

The teacher can ask the students "*Why do you think it is snowing in the North of?*",...

Activity 3

Some students perform a TV forecast to describe the weather on the **Activity 2** weather maps (use Power Point slides 29 and 30). They start by saying :

- *Hello! Weather news for today in Catalonia.*
- Today it is in the*

(Music can be used before the students start their performance, like in TV programmes).

Explain the importance of forecasting nowadays. Give some examples of activities they do, that depend on weather conditions.

Examples of questions the teacher could use:

Can you go to the playground when it is raining?, Can you go skiing when it is very hot and sunny?...

Activity 4

Give the students Activity sheet 2 and tell them to look at the UK map again and complete the sentences by writing the name of some cities (exercise 1). In the second exercise, children have to draw the weather icons that represent the different weather conditions in the forecast.

RESOURCES

- Power Point presentation (lesson 1).
- Weather data collection sheet.
- "UK cities cards" and "Directions sheet".
- Activity sheets 1 and 2.

UNIT: WEATHER INFORMATION**LESSON 2****DEVELOPMENT****Introduction**

Use a big map of Catalonia to revisit the 4 main directions (North, South, East and West). Introduce the other directions that a compass has. Ask students to guess where the North East is, the North West, the South East and the South West of Catalonia. Locate these directions on the map and label them.

Show them what a compass is and how it works.

Activity 1

Give the students Activity sheet 3 and tell them to read the first exercise. Explain it and give them about 10 - 15 minutes to draw the plan of the school (bird's eye view). Then divide them in groups of two or three students and provide each group with a compass to use in the playground. Once they are in the playground, give them 15 minutes to locate the main directions and write them down on the plan they made.

When they return to the classroom, they report their findings and correct the exercise together.

In	the N orth the N orth E ast the N orth W est the E ast the W est	there is	the nursery. the entrance gate. the hall. the gym. ...
	the S outh the S outh E ast the S outh W est	there are	some trees. the classrooms. ...

After the correction, read exercise 2 and give them a few minutes to locate the directions in their town map and place their school. Correct it together.

Activity 2

Hand out Activity sheet 4 and tell them to find the vocabulary related to weather and compass directions in the word search (there are nine words).

RESOURCES

- Catalonia map.
- Compasses.
- Activity sheets 3 and 4.

UNIT: WEATHER INFORMATION**LESSON 3****DEVELOPMENT****Introduction**

Introduce the concept of wind direction by using the Power Point presentation. Show the first slide which shows part of the Weather data collection sheet grid and revise all the directions that a compass has. Use slide 6 to introduce the name of the Catalan winds. Orally, ask a few questions about the winds' names. E.g. *What is the east / north east / south west / ... wind?*

Activity 1

Choose seven children in the class to show how to play the Winds loop game. Tell them that the student with the coloured card is the one who begins and finishes the game. Once they see how to play the game, students can work in groups.

Activity 2

Give the students Activity sheet 5 and tell them to complete the compass rose, and do the next two exercises (both related to the Catalan winds). In one exercise they have to answer some questions and in the other they have to complete some sentences.

When they finish, put them in pairs to ask questions about the Catalan winds.

STUDENT 1	What is the	north north east north west east ...	wind?
STUDENT 2	It's the	Tamuntana Gregal Llevant Xaloc	

Correct the exercise altogether.

Activity 3

Students work in pairs, A and B. Each one has a different copy of Activity sheet 6. Both sheets have a map of the UK with a few cities missing. They have to ask their mates the coordinates to write the names of those cities.

E.g. - *What is the city in 12 -6?*
- *It is Edinburgh.*

Once they have all the cities' names on their maps, they take the UK weather cards (note there are two sets of cards, for students A and B). They have to ask questions about the weather forecast in those cities then draw weather symbols on the UK maps.

E.g. - *What is the forecast for tomorrow in.... (Cardiff)?*

Their partners will read the answers on their cards.

Activity 4

Students do the second side of Activity sheet 6. They write the information drawn on their maps.

RESOURCES

- Power Point Presentation (lesson 3).
- Loop game.
- Activity sheets 5 and 6.
- UK weather cards

UNIT: WEATHER INFORMATION**LESSON 4****DEVELOPMENT****Introduction**

Revise the Catalan names of the winds by giving the students Activity sheet 7. In this sheet they have four overlapping circles. Children write the name of one wind in each part.

Activity 1

Use the Power Point presentation to let the children see what a wind vane is and show them the materials and steps they have to follow in order to make one.

First introduce the materials (slides 3 to 10) and tell them to fill in the first side of Activity sheet 8. Divide the class in groups of 3 or 4 students. Then explain them how to make the wind vane (slides 11 -16) and provide them with everything needed for the experiment. Once the wind vane is finished, children go to the playground to use it in order to find the wind direction. Next, they go back to the classroom and complete the other side of the sheet.

The different groups can compare their findings.

Children will need language support to complete the experiment sheet:

I am investigating...	wind direction. a wind vane. ...
The wind vane ...	will turn. will not turn. ...
I would change the...	card. clay. pencil ...

Experiment guide

MATERIALS	STEPS
For each wind vane... - a plastic cup with a hole on top - a pencil with a rubber end - a plate - a squared piece of coloured thick card - a straw - a pin - modelling clay (or plasticine)	<ol style="list-style-type: none"> 1. Push a pencil through the hole of the plastic cup. 2. Use the clay to secure the cup to a plate and the pencil. 3. Write N, S, E and W in each corner of the squared card piece. Cut a hole in its middle and push it over the pencil. 4. Cut two small triangles from the card and tape them to the ends of a straw. 5. Push a pin through the middle of the straw and then into the eraser. 6. Put the vane outside and point it so that N matches North on a compass. <p>(REMEMBER: The wind vane's arrow points in the direction the wind is coming from).</p>

This activity of finding the wind direction using the vane can be repeated during the unit development over several days. Their findings can be compared with the information taken from the school weather station.

RESOURCES

- Power Point Presentation (lesson 4).
- Experiment materials (look at the [Experiment guide](#) for more details).
- Compasses.
- Activity sheets 7 and 8.

UNIT: WEATHER INFORMATION

LESSON 5

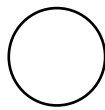
DEVELOPMENT

Introduction

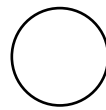
Divide the class in pairs and give each one a set of ten cards with pictures that are related to *cold* or *hot* adjectives. Tell children to classify the cards in 2 groups according to their own criteria. After a few minutes, ask them about their classification and why they chose it

Draw two circles on the board and stick the flashcards that contain the images on the students' cards when they tell you their classification.

GROUP 1



GROUP 2



Students might answer....

They (pointing at pictures in group 1 or 2) are all	hot. cold.
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Ask students how can they know if something is hot or cold (*by feeling, by using a thermometer...*). Explain them that *thermometers measure temperature* and ask about the unit we use for that purpose (*degrees: Celsius*). Draw a thermometer on the board and explain there are positive and negative temperatures (a vertical line can help them to understand that). Introduce the adjectives *high* and *low*, and relate them to *cold*, *warm* and *hot*.

Ask them:

- Is a high temperature hot or cold?
- And a low temperature?

Show them the pictures of the cards (**Introduction activity**) and ask if the temperature is high or low on them.

Activity 1

Give them Activity sheet 9 which has two exercises. In the first one they have to complete sentences about temperature measurement. In the second exercise students have to put in order a few temperatures values from the lowest to the highest.

Activity 2

Do the Bottle thermometer experiment in front of the students to show how temperature can affect weather (you can also explain the experiment by showing the Power Point presentation 5). Children fill in Activity sheet 10.

Children will need language support to complete the experiment sheet:

I am investigating...	temperature. a thermometer. ...
The coloured liquid ...	will go up. will go down. ...

Experiment guide

MATERIALS	STEPS
<ul style="list-style-type: none"> - small bottle of water (with a hole in the lid). - clear drinking straw - modelling clay (or play dough) - water - ink (or food dye) - a hairdryer 	<ol style="list-style-type: none"> 1. Fill in the bottle (halfway) with water. 2. Add a few drops of ink. 3. Put the lid on the bottle and make a hole in it. 4. Put the straw through the lid and press modelling clay around it. 5. Blow into the straw (until liquid comes to about the middle of the bottle). 6. Then blow hot air from a hairdryer onto the bottle. 7. Put the bottle in a bowl with very cold water.

With this experiment you will see that the water rises into the tube when heated and it drops lower in the tube when cooled. This is because liquids expand when heated and contract when cooled. The mercury thermometer we use is based on these facts.

RESOURCES

- Students' cards and teacher's flashcards (hot-cold).
- Experiment materials (look at the Experiment guide for more details).
- Power Point presentation (lesson 5).
- Activity sheets 9 and 10.

UNIT: WEATHER INFORMATION**LESSON 6****DEVELOPMENT****Introduction**

Revisit *high-low temperature* by drawing a vertical line that represents a thermometer on the board. Write two temperatures on the board (positives or negative temperatures) and compare them.

E.g. *A is lower than B. B is higher than A.* (you can locate them on the line drawn).

Divide the students in pairs and give them a dice and a set of six cards (each card has a number on one side and two temperature values on the other side). Explain they have to put the cards down with the numbers face up. (the cards with numbers on top and) Throw the dice. The number they get indicates the card they have to turn over. They look at the temperatures on the card and compare them.

4°C	-2°C
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Students first use “*lower*”, like on the previous example (*A is lower than B*). After a few minutes ask a few students to compare an example of the activity for the rest of the class (to check understanding. Then tell them to do the same again but using “*higher*” (*B is higher than A*).

Activity 1

Draw a temperature graphic on the board (you can do it with the temperatures of last week) and ask the pupils what it is. Explain that the graphic lines are called vertical and horizontal axes. Tell the students that graphics can be used to study what the weather is like in different places during a period of time. Write a few questions about the graphic on the board:

- *Is it a hot or cold month?*
- *What is the highest temperature?*
- *What is the lowest temperature?*
- *Look at days 5 and 6: Which one is colder?*
- ...

Explain what is the average temperature and tell them to find the average temperature for the week represented in the graph.

Activity 2

Students do Activity sheet 11, where they are given the information of temperatures for a month and have to make a graph.

Then they report the information about those temperatures.

<p>The hottest day is ... The coldest day is... Day ... was colder than day ... Day was hotter than day ... The temperature average is...</p>
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Activity 3

Remind the students how to use a thermometer (explain that we follow the line in the middle to know the temperature. Bring one or some thermometers to the classroom and show them). Ask what is the temperature in the room and check it.

Locate five thermometers in different sites of the school (indoors and outdoors). Organize the students in groups of five and explain that each group will be recording the temperature of a different site at different times during a certain day. Show a plan of the school and ask them to label the five spots where the five thermometers are going to be. Give each group a recording sheet (Activity sheet 12). Ask them to fill in the first part of the activity sheet and agree which are going to be the coldest/hottest places (you can also let them think about the coldest/hottest places indoors and outdoors). Ask them, 'why?' to let them think about the factors that affect temperature.

RESOURCES

- Temperature cards.
- Activity sheets 11 and 12.
- Thermometers (some located in different sites of the school).

UNIT: WEATHER INFORMATION**LESSON 7****DEVELOPMENT****Introduction**

Bring to the classroom three bowls with water: a bowl of iced water, a bowl with water at room temperature and a bowl of hot water.

Students have to predict the temperature of the water in the three bowls. To help them, say the temperature of the room. Give the students Activity sheet 13 and tell them to write their predictions in the first column of the chart in the first exercise. Then use a thermometer to measure the temperature in the bowls. (and) Tell them to write the temperature recorded in the second column of the chart.

Explain that temperatures can be cold (when it is below 10 °C), warm (when it is between 10 – 20 °C) or hot (when it is over 20°C). Copy this information on the board and tell them to complete the third column of the table by writing “*Water is cold / warm / hot*”.

Children complete the second exercise and then the teacher can ask a few questions about their findings and predictions:

Did you think it was colder or hotter? Where do you think is the highest/coldest temperature?, And the lowest/coldest? ...

Students, in pairs compare their results:

I thought the temperature was °C	and but	it is°C.
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Activity 1

Students need Activity sheet 12 where the groups have recorded the temperatures of different sites of the school at different times during one the previous day. Give the students Activity sheet 14 and tell them to look at the first exercise to complete the column related to their group.

Activity 2

Mix students to let one member of each group join a new group (those groups of 5 children will have one member from each group that worked on the Activity sheet 12). Explain that they will have to tell their mates the information about the temperatures recorded in their sites.

They take turns to ask and answer questions to complete the chart in Activity sheet 12:

<ul style="list-style-type: none"> - What was the temperature at ... o'clock? - At ... o'clock the temperature was ... degrees.

Activity 3

Explain what a minimum and maximum temperature of a day, month is. Then children look at the second exercise on the activity sheet. Using different colours, they circle the minimum and maximum temperatures of each site.

Activity 4

Let the children think about the coldest place at the school. Ask them why the temperature is different in each site. Write some of the factors that affect temperature (exercise 3), like North – South sides are colder or warmer, shade,... Do the exercise together.

Activity 5

Children do exercise 5. They have to find the average temperature for the values recorded in each school site.

RESOURCES

- Three bowls of water at different temperature (experiment materials).
- Thermometers.
- Activity sheet 12 done (with information about temperature of a previous day).
- Activity sheets 13 and 14.

UNIT: WEATHER INFORMATION**LESSON 8****DEVELOPMENT****Introduction**

Use Power Point presentation to introduce the activity. Revisit the importance of forecasting and brainstorm a few reasons (*we can plan activities in our free time, there are outdoor activities, you can't go to the playground when it is raining...*). Show four weather symbols (slide 3) and tell them to think about activities that can or can not be done in each weather condition. Provide students with language support in slide 4. In pairs, give them a small board to copy the chart shown in slide 5 and write their ideas.

When it is	sunny snowing raining windy ...	we can we can't	play ... do ... go to... ...
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In slides 6 -10 there are some photographs of activities in different weather situations.

Activity 1

Ask students to think about the measurement tools already seen by asking: *What do we use to find wind direction? What do we use to measure temperature?* Show slide 12 where there is a picture of an anemometer and let them guess what is it and why we use it. Tell them we use *anemometers* to measure wind speed. Bring one to the classroom and blow on it or turn an electric fan on to show how it works (they have to count how many times the anemometer will spin in one minute by taking the coloured cap as a reference). Explain how to make an anemometer (slides 12 – 19) and elicit from the students the names of the materials shown. Motivate children to make one voluntarily at home and feel free to bring it to the classroom to show and share.

Experiment guide

MATERIALS	STEPS
<ul style="list-style-type: none"> - 2 strips of balsa (36 cm) - three steel washers - balsa glue - long nail and a screw - 3 transparent cups and 1 coloured plastic cup - post or fence to nail the anemometer - watch - a fan 	<ol style="list-style-type: none"> 1. Cut the balsa strips 36 cm long and find the centre of them to drill a hole in each. 2. Make a bearing with three steel washers. 3. Drill one hole at the centre point of each of the two balsa wood strips. 4. Drill a hole in the end of the post for the screw. 5. Glue one washer to the end of the post and to one side of each of the balsa strips. 6. Glue the two balsa strips together at right angles to each other with the washers on the outside and the screw through the hole to ensure it is centred. 7. Glue a plastic cup at the two ends of each of the balsa strips. Put two pairs of cups on one balsa strip the same side as the washer, put two pairs of cups on the other balsa strip on the opposite side of the washers (note the cups have to point in opposite directions). 8. When the glue is dry, assemble using the screw. Put the screw through the first balsa strip with the washer. Then put the cups on the upper surface. Next put the second strip with the washer on the under side and the cups on the opposite side. 9. Tighten the screw sufficiently into the post to hold the assembly without stopping it rotating.



Activity 2

Divide the students into groups of three and give each a set of cards of “3 way matching game”. Tell them to put the cards into three groups. Remember there is some new information (about types of wind speed). Check they do it correctly and explain the adjectives *calm* and *strong* (for wind speed).

A wind vane ...	measures wind speed	Tells us if wind is blowing from North, South, East or West.
A thermometer ...	measures temperature in degrees (Celsius).	Tells us if it is hot, warm or cold.
An anemometer ...	measures wind speed in kilometres per hour.	Tells us if wind is calm, light, gentle, strong ...

Activity 3

Children do the first side of Activity sheet 15. They read and complete two short texts about the measurement tools already mentioned. Give them time to finish the activity and compare it with their group mates. Then correct it together.

Activity 4

Explain that wind can blow at different speeds. They can be described as light or strong. A light wind is called a breeze and a strong one is a gale. Winds can be classified according to this criterion. Put the students into groups of three again and give each a set of “Wind cards (Beaufort scale) and a wind chart sheet”. Let the students predict the order from 2 to 6 of how strong they are by looking at the adjectives on the cards (first, tell them wind strength 0, 1 and 7). Give time to do the activity and check it together. Then tell them to fill in the chart on the second side of the Activity sheet 15.

- Note: *Beaufort scale* has 13 types of wind strength in its classification and the first eight are...
0. Calm / 1. Light air / 2. Light breeze / 3. Gentle breeze / 4. Moderate breeze / 5. Fresh breeze
 6. Strong breeze / 7. Near gale

Activity 5

Children keep working in the same groups to do Activity sheet 16. Note that there are three different sheets (A, B and C) as this is a trio dictation activity type. The pupils ask their mates for the missing information in a “wind speed report calendar” and then fill it in. When they finish, they answer the three questions about the calendar.

Students will need this language support to do the trio dictation:

- | |
|--|
| <ul style="list-style-type: none"> - What was the wind speed on (Wednesday the 1st)? - It was (10) kilometres per hour |
|--|

RESOURCES

- Power Point presentation (lesson 8).
- Experiment materials (look at the Experiment guide for more details).
- 3 way matching cards.
- Wind cards (Beaufort Scale) and winds chart sheet.
- Activity sheets 15 and 16.

UNIT: WEATHER INFORMATION**LESSON 9****DEVELOPMENT****Introduction**

Check students' knowledge by showing them the flashcards of the measurement tools they have already seen in previous lessons (thermometer, wind vane and anemometer). Ask them a few questions: *What is it?, What does it measure?, What does it tell us?...* You can use the flashcards or the measurement tools made to revise what they know.

Activity 1

Do experiment or show Power Point presentation to explain it. Then, children do the first side of Activity sheet 17.

Experiments guide

MATERIALS	STEPS
<ul style="list-style-type: none"> - metric stick - a cord or wire - paper clips - a pot with lentils - a balloon - a baby bottle - a candle 	<p>PREPARATION</p> <ul style="list-style-type: none"> - Drill holes from each end of the metre stick and in its exact centre. - Put one paper clip in each hole to hang two pieces of cord. - Place a cord or wire through the centre hole and suspend the stick from a chair back or a peg.

EXPERIMENT 1

1. Blow up one or a few balloons. Tie their mouths tight and hang them on of the clips at the end of the stick.
2. Suspend a pot from the other clip and put some lentils on it. Then, let the air out the balloon. (The pot goes down as the air is let out of the balloon because air has weight).

EXPERIMENT 2

1. Balance an empty baby bottle on one end of the metric stick and the pot with lentils on the other.
2. Hold a candle flame for one minute near the mouth of the bottle. Remove the flame and balance the scale again. (The bottle goes up when heat is applied to the air in it. You must remove lentils from the pot on the other end to balance the scale. This happens because warm air weighs less than cold air occupying the same place / or cold air weighs more than warm air).

Activity 2

Show the students the picture of a barometer and let them guess what it is for. Tell them it is used to measure air pressure. Explain that air pressure can be high or low (like the values in a thermometer). Low pressure occurs when air becomes warmer (good weather can be predicted) and high pressure occurs when air becomes colder. Air pressure gives us a good indication of what the weather will be like for the next few days.

Children do the second side of the Activity sheet 17.

Activity 3

Give the students small boards and tell them they are going to watch a video in which (are shown) they will see the materials needed to make a barometer. Play the video mute (no voice) while the students write on their boards the materials seen.

The video link is: <http://uk.youtube.com/watch?v=K7hafGGgluM>. (Title: *How to Make a Barometer: Supplies for Making a Barometer*)

(Materials needed are: paper, cello tape, a glass jar, markers, a balloon, a straw, scissors and glue).

Activity 4

Tell the students they are going to watch another video about how to make a barometer. Give them the "Barometer cards" that have the steps for making a barometer. Let the pupils predict the order of the cards, then play the video (again, with no voice) and give them the chance of changing the card order if necessary. The video link is: <http://uk.youtube.com/watch?v=jsWrM1VBMU8>. (Title: How to Make a Barometer : Tips for Making a Barometer).

Activity 5

Show a pluviometer or rain gauge already made (or use a flashcard) and ask what it is for. Explain it shows the amount of precipitation in a certain place. Then students do Activity sheet 18, about how to make a pluviometer.

Experiment guide

MATERIALS	STEPS
<ul style="list-style-type: none"> - a plastic funnel - a bottle or pot - a ruler - a permanent marker - a knife. 	<ol style="list-style-type: none"> 1. First, cut the bottle. 2. Then mark the millimetres with a permanent marker, using a ruler. 3. Next, place the funnel on top of the bottle.

RESOURCES

- Measurement tools or flashcards with pictures.
- Activity sheets 17 and 18.
- Power Point presentation (lesson 9).
- Experiments materials (look at the Experiment guide for more details).
- You Tube videos.

UNIT: WEATHER INFORMATION**LESSON 10****DEVELOPMENT****Introduction**

Use this experiment to show students what is air humidity:

Experiments guide

MATERIALS	STEPS
- empty tin can - ice and water -ink or food dye	1. Remove the label from an empty tin can 2. Fill it with ice and add water. 3. Put a few drops of ink (or food dye). 4. Let it stand on the table for a while. 5. Show the water inside the can is coloured but not the drops formed outside it.

With this experiment children can see that the can seems to be “sweating” for drops of water form on the outside. These drops occur because of the water vapour in the air around the can, as this air has been cooled by the ice. (The small particles of air, the air molecules, are slowed down when they become cold, so they move closer together and change into liquid form. Clouds are formed like that).

Activity 1

Show a hygrometer to the students and, once more, let them guess what it is for. Explain it is used to measure the humidity that is in the air and that this is measured in percentages. Tell them there are many types of hygrometers. Give the pupils Activity sheet 19, read the hygrometer description with them and tell them to fill in its factfile. When they finish that, they write the description of the pluviometer.

Activity 2

Students play the Measurement tools card game in groups of 3. Each group needs a set of cards and three dice. They put the cards with the side of the numbers up and throw then the dice, then they sum up the numbers on them to pick up the card with that number. They have to answer the question on the card they picked up and check if they did it correctly by looking at the back of the card.

Activity 3

Explain that the rain measured by pluviometers can be recorded and used to make bar graphs. Students do Activity sheet 20. They have to draw a bar graph.

RESOURCES

- Experiments materials (look at the Experiment guide for more details).
- Activity sheets 19 and 20.
- Measurement tools card game.

UNIT: WEATHER INFORMATION**LESSON 11****DEVELOPMENT****Introduction**

Brainstorm the information that can be taken from a weather station.

Activity 1

Give Activity sheet 21. Students fill in the table about the unit content.

Activity 2

Show Power Point presentation. Let the students predict the info in each slide. They check the information shown with what they have in their tables.

Activity 3

Pupils do Activity sheet 22. They have to complete the weather facts definitions and match them with the words.

The definitions are:

1. The measurement of how hot or cold something is. (Temperature)
2. Strength of the wind. (Wind speed)
3. Compass point the wind is blowing from. (Wind direction)
4. Weight of air pressing down on Earth. (Air pressure)
5. Ratio of water vapour contained in the air. (Relative humidity)
6. Liquid precipitation in the form of water drops that fall from clouds. (Rain)

RESOURCES

- Activity sheets 21 and 22.
- Power Point presentation (lesson 11).

UNIT: WEATHER AROUND THE WORLD**LESSON 1****DEVELOPMENT****Introduction**

Revisit knowledge by playing Squares game (it is on slide 2 of the Power Point presentation but can also be printed and laminated). To play, one child describes a picture and the others say the position of the square it is in. (E.g. A says “*It’s an anemometer*” and B says “2C”)

Children might say:

It’s a (barometer).
It’s for measuring
It’s ...(cloudy).

Activity 1

Tell the students to think about the weather conditions during the year: *Is it always the same?* Ask them to talk to their partners about the weather during different months (they can look at slide 3 to see language support).

Give them small boards to write one or two sentences on them. Then read them.

(In my country...)* We	always usually sometimes never	have	hot weather warm weather cold weather rain snow sun wind	in	January February March April May June July August September October November December
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(* Note: “In my country” can be used for those students who come from other countries. This can be used to compare their weather with the weather in the school town).

Activity 1

Ask your students about the weather conditions in a year: *Why do they happen?* Explain they are due to the seasons changes. Play a short BBC video which has a sequence of the four seasons in a landscape. They say the name of the seasons.

The web link is: <http://www.bbc.co.uk/learningzone/clips/> . The video name is, “Seasons in the Northern Hemisphere of planet Earth” and its clip number is 1595

Activity 2

Provide the students with a Season concept map and their cards (there are four different concept maps, one for each season). They have to put each card in the proper place. Check their answers and join students in groups of four (in each group there will be a pupil with a different *Season concept map*). Give each pupil Activity sheet 23 and tell them to fill in the table by asking the children in their group.

Activity 3

Show the students the PowerPoint slides to explain why seasons take place (4 to 15). Then children do Activity sheet 24.

RESOURCES

- Seasons' concept map.
- BBC video.
- Activity sheets 23 and 24.
- Power Point presentation (lesson 1).

UNIT: WEATHER AROUND THE WORLD**LESSON 2****DEVELOPMENT****Introduction**

Students work in groups of three and each group has three different landscapes pictures and a Thinking sheet with questions about those landscapes. They have time to talk in the group and then all the class talks about the images and compares them.

Activity 1

Show Power Point presentation from slides 2 to 5 to explain that there are different zones in the Earth, depending on how much heat they get from the sun (tropical, polar and temperate zones). Then show slide 6, which has the 3 pictures they have already worked on, and ask them to guess in what zone they are. Show slides 7 to 9 to tell the students the zones and places the pictures are taken from.

Activity 1

Students do the first side of Activity sheet 25. They have to read short descriptions of the three zones to guess which one is each and label some landscape images. Use Power Point presentation to show the correct answers and to locate those zones in a world map (slides 10 – 15).

Activity 2

Students do the second side of Activity sheet 25. They locate the three weather zones in a world map, by shading them with different colours.

Activity 3

Play a BBC video (its duration is 3'06minutes). First students watch it once with no sound and after that ask them about what they saw. Then hand out Activity sheet 26 (multiple-choice activity) and ask them to read the questions. Play the video again and tell the students to answer the questions. The web link is: <http://www.bbc.co.uk/learningzone/clips/> . The video name is, "Visiting Grenada in the Caribbean" and its clip Lumber is 335.

RESOURCES

- Landscapes' pictures and Thinking Sheets.
- Power point presentation (lesson 2).
- Activity sheets 25 and 26.
- BBC video.

UNIT: WEATHER AROUND THE WORLD**LESSON 3****DEVELOPMENT****Introduction**

Use the overhead projector to show a web site where students can check the continents' names. The web link is: http://www.sheppardsoftware.com/World_Continents.htm. Click on the Level L activity (tutorial level).

Activity 1

Look at the world map (previous activity) and ask children about the last lesson content: *Is the weather the same all around the world? What are the three Earth Zones?*. Tell them there are more than three climates and let them guess what a climate is. Explain that the *climate of a place is the average weather conditions taken over the past thirty years*.

Use the overhead projector again, to show the BBC website that has the different climates of the world: <http://www.bbc.co.uk/schools/gcsebitesize/geography/weather/globalclimaterev1.shtml>. (Click on the coloured squares under the map, to show the different climatic zones).

Activity 1

Students work in pairs and use the internet to do a web search about a country. Give them Activity sheet 27, in which they have two websites and the information they have to find. Tell each group the country they have to find information about and try to choose countries that have different world climates. E.g. Iceland, Brazil, Barcelona,...

Activity 2

Students do Activity sheet 28. They write a report with the information found about the country and prepare a short presentation to explain it to the rest of the class (they will do the presentation next lesson). They can use the Language support sheet for doing the writing.

RESOURCES

- Internet web links.
- Activity sheets 27 and 28.
- Language support sheet.

UNIT: WEATHER AROUND THE WORLD**LESSON 4****DEVELOPMENT****Introduction**

Revisit students knowledge by asking them about the different world climates and write them on the board (leave the climate list on the board as the climates will be named in the next activity). Use the overhead projector to show the BBC web site about climates (<http://www.bbc.co.uk/schools/gcsebitesize/geography/weather/globalclimaterév1.shtml>).

Activity 1

Students present their work in groups of two (presentations should just last a few minutes each). (You can leave the BBC web site about world climate on the screen when the students present their work to let them point at the country and climates they have searched for).

Activity 2

Prepare a display with a big world map where students can label the countries they presented. They can also hang on sheets with the main country information.

RESOURCES

- Internet BBC web link.
- Activity sheet 28 (already done by the students).
- Display materials.

UNIT: WEATHER AROUND THE WORLD**LESSON 5****DEVELOPMENT****Introduction**

Students do Activity sheet 29 (Assessment). They have two exercises: a *concept cartoon* activity and an *odd one out exercise*.

Activity 1

Give the students small boards. They look at the Power Point presentation and write the answers to the 10 questions. At the end of the questions, show the answers and explain to the students.

Activity 2

Students do the self assessment sheet (Activity sheet 30).

RESOURCES

- Activity sheets 29 and 30.
- Power Point presentation (lesson 5).