Homework:
• Pupils can continue to research their chosen river and feed back to the class

Success Criteria:
• I can explain some of the ways rivers are used around the world
• I can explain what a river source is
• I can explain why a river doesn’t flow in a straight line
• I can use atlases, maps, books and computers to research my chosen river

Learning Objectives:
• Identify and explain physical features of a river
• Research a river using maps, books and the internet

Lesson activity

Starter
• Lesson objectives slide 2
• Explain that this unit will be looking at rivers – focusing on London’s River Thames
• Use this part of the lesson to explain that the unit will include a trip to The London Eye, which is located on the bank of the Thames and will enable pupils to look down at the river from an aerial perspective to see how the river curves and bends
• On the IWB ask pupils to brainstorm some river words, and add some additional ones like: ‘meander, mouth, tributary’ along with their meanings

Task 1:
London Eye / River Thames
• Ask pupils to brainstorm ways in which rivers can be used (source of food, transportation, recreation etc)
• Write their answers on the IWB. You can then show them slides 3-5 to run through some of their responses
• Now ask pupils to think about the ways in which people might use the Thames – you can use slides 6-7 which show photography of the Thames area around The London Eye as stimulus
• Pupils should now complete Worksheet 1, guessing what river vessels and uses of the Thames they might see during their trip to The London Eye

Task 2:
Research a river
• Using the River Thames as an example, explain that even the greatest of rivers will begin as a smaller ‘source’, a place where the river begins its journey – this is usually found in a high place such as a hill/s or mountain/s but some rivers begin where a natural spring releases water from underground
• Show slides 8-10 which illustrate the start of the River Thames – and an aerial view of its journey out to the North Sea
Lesson activity

Task 2:
Research a river (cont.)

• Ask pupils why they think it doesn't take a straight path to the sea and instead twists and meanders / discuss the surface of the earth and the fact that water would probably want to take a direct path, were it not for uneven surfaces and obstructions
• Cut and laminate the rivers on Worksheet 2 (Amazon, Hudson, Nile, Ganges, Rhine, Mississippi)
• Now section the class into six groups and ask each group to choose a river to research. You can use slides 11-16 as stimulus for the different rivers
• The rest of the lesson should be spent using atlases, maps, ICT facilities and books to research their chosen river. Pupils should use Worksheet 3 to detail their findings. Google maps (or similar) can be used to study the aerial view of their chosen river to see how it meanders

Plenary

• Using Worksheet 4, ask pupils to write down two facts they have learned during the lesson

Adaptation for Key Stage 1

Task 1: younger children can be encouraged to draw their responses to this activity instead of writing them
Task 2: this activity can be adapted to suit younger children by providing them with a list of urls from which to research, such as the following sites:

**The Amazon**
http://www.sciencekids.co.nz/sciencefacts/earth/amazonriver.html
http://resources.woodlands-junior.kent.sch.uk/homework/rivers/amazon.htm

**The Hudson**

**The Nile**
http://resources.woodlands-junior.kent.sch.uk/homework/egypt/nile.htm
http://www.sciencekids.co.nz/sciencefacts/earth/nileriver.html

**The Ganges**
http://kids.baps.org/thingstoknow/hinduism/62.htm
http://geography.about.com/od/culturalgeography/a/Ganges-River.htm

**The Rhine**
http://resources.woodlands-junior.kent.sch.uk/homework/rivers/rhine.htm
http://wwf.panda.org/about_our_earth/teacher_resources/best_place_species/current_top_10/rhine_river.cfm

**The Mississippi**
http://www.sciencekids.co.nz/sciencefacts/earth/mississippiriver.html
http://www.socialstudiesforkids.com/articles/geography/mississippiriver.htm
http://resources.woodlands-junior.kent.sch.uk/homework/rivers/mississippi.htm
When I visit The London Eye I think I will see people using the Thames in the following ways:
Two facts I have learned in this lesson are:

1. 

2. 
The Amazon River
The Hudson River
The River Nile
The Ganges River
The River Rhine
The Mississippi River
Worksheet 3: The River Thames and The London Eye

Use this worksheet to help you research your chosen river. You can start by trying to answer these questions.

1. What is the name of your chosen river?

2. Where in the world is your river?

3. How long is your river?

4. Does your river run through a city?

5. How do people use your chosen river?

6. List any interesting features or facts you can find about your river.
Lesson content: Literacy / ICT / History

Homework:
- Pupils can be asked to complete their adventure stories at home

Success Criteria:
- I can use my senses to describe what I might see, hear etc on The London Eye
- I can use a story mountain to plan my own adventure story
- I can use my plan to write my own adventure story

Learning Objectives:
- Pupils can identify key features of an adventure story
- To use their imagination and respond by using descriptive language

Lesson activity

The content of this lesson plan can be split across two lessons with the first focusing on the planning of the story and the second on the writing of the story

- Ask pupils to close their eyes and imagine they are travelling on The London Eye
- Encourage pupils to share how they might be feeling and write these on the IWB

Task 1: What is an adventure story?

- Discuss what pupils think an adventure story is and what features an adventure story has. List these on the IWB
- Talk about previous examples of adventure stories that children have read and what made them want to keep reading / listening
- Discuss the structure of an adventure story, what are the key elements? E.g. problem, event, climax and resolution
- As a class, discuss possible ideas for an adventure and list these on the IWB
- Using Worksheet 1, pupils should plot out an adventure story entitled ‘Adventure on The London Eye’, using the idea that they stepped onto The London Eye in 2014 but when they stepped off, found themselves in a different time (future or past)
- They should plot the parts of their story on their story mountain with the build-up on one slope of the mountain, the most exciting part (the climax) at the top and the resolution on the other side. Pupils should be encouraged to think about the characters they are writing at each stage of their story: in the opening (they should set the scene with their characters), the build-up (getting to know the characters as the problem presents itself), the climax (and how the characters respond) and then how the characters feel at the end
Lesson activity

**Task 2:** Write your own adventure story

- Equipped with their completed story outline (Worksheet 1), pupils should begin to write up their adventure story.
- Where possible, pupils should be encouraged to utilise their understanding of key devices such as connectives, adjectives and adverbs.
- To support their understanding, a word bank of connectives, adjectives and adverbs can be displayed on the IWB.

**Plenary**

- Using slide 5 ask pupils to put the components of an adventure story into the correct order. Slide 6 shows the correct order.
- Remind pupils about their trip to The London Eye in the next lesson.

**Adaptation for Key Stage 1**

- **Task 1:** younger children should be given the simple story mountain outline on Worksheet 1 (KS1) to work from. They should then be encouraged to orally tell their story to a partner so they can then summarise it into bullet points.
- **Task 1:** the bullet points can then be used to create a storyboard instead of a written story. The storyboard template on Worksheet 2 (KS1) can be used to assist with this.
Worksheet 1 (KS1): Adventure on The London Eye

Name: ____________________________ Class: _____________

Story Mountain

Beginning:

Middle:

End:
Worksheet 1: Adventure on The London Eye

Name: ________________________________ Class: ________________

Connectives:
Before, After, If, When

Adjectives:
The ‘beautiful’ flower or the ‘old’ man

Adverbs:
Suddenly, Quickly, Cheerfully

Tip:
Try using adventurous words to make your story more exciting. Here are a few suggestions: bravely, fiercely, boldly, wild, hastily, frightening, mysterious, colossal, whisper, rapid, hideous

Create your own story mountain for your adventure story
Worksheet 2 (KS1): Story planner

Name: ____________________________  Class: ________________

<table>
<thead>
<tr>
<th>Who?</th>
<th>Where?</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

What happened?

_______________________________
_______________________________
_______________________________
_______________________________
_______________________________
_______________________________
_______________________________
_______________________________
Lesson content: Maths / Art / Geography

Key words: River Thames, Symmetry, Equilateral Triangle

Homework:

Success Criteria:
- I can identify north, south, east and west
- I can sketch the horizon from one direction of the capsule

Learning Objectives:
- Observe and document different shapes
- Understand compass directions
- Work together with a partner or in a small group

Lesson activity

Starter
- Safety discussion regarding where to meet if pupils get lost, order of the day etc
- Explain to pupils that they will have one worksheet to complete during the rotation and ensure each pupil has a copy of the worksheet and a pencil

Task 1: I-spy from The London Eye
- To engage the pupils with their view from The London Eye, you might like to play a group game of I-spy. The pupil that spots the answer first, will take the next turn. These can be varied in difficulty from simple sights like ‘A person with a bag’ to landmarks and landscape features (bridges, buildings etc)

Task 2: North, South, East or West?
- Within the capsule you will see compass points marked above the door (and at the same height along each ‘side’)
- Ensure that pupils are able to see these compass points and explain that you will be asking them questions which rely on their observational skills
- Assuming your group has not booked a Discovery Tour, ask pupils to plot on their worksheet at which direction from the capsule they can see the following landmarks. They can work in pairs or small groups for this activity (as some of the landmarks may be trickier to locate):
  1. Parliament Clock
  2. Buckingham Palace
  3. St Paul's Cathedral
  4. The Shard
  5. The Cheesegrater
  6. Canary Wharf
- If time permits, and within their pairs / small groups, pupils can create a few questions of their own to test each other
Lesson activity

- **Task 3:** Using Worksheet 1, pupils should choose a view from the capsule and draw the buildings on the horizon, observing the shapes of the buildings as they do so. This can then be shaded as a silhouette.

- **Task 2:** can be adapted for younger children by using language based on turns (¼ turn, ½ turn, ¾ turn, clockwise, anti-clockwise etc). Pupils can be given a set of questions e.g. face Parliament Clock, turn ¼ turn clockwise. Which landmark can you see now?
- **Task 3:** is suitable for all ages.
Can you locate the following landmarks and note down whether they are North, South, East or West? If you are able, use the eight point compass if a landmark is between two compass points.

<table>
<thead>
<tr>
<th>Landmark</th>
<th>Compass point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parliament Clock</td>
<td></td>
</tr>
<tr>
<td>2. Buckingham Palace</td>
<td></td>
</tr>
<tr>
<td>3. St Paul’s Cathedral</td>
<td></td>
</tr>
<tr>
<td>4. The Shard</td>
<td></td>
</tr>
<tr>
<td>5. The Cheesegrater</td>
<td></td>
</tr>
<tr>
<td>6. Canary Wharf</td>
<td></td>
</tr>
</tbody>
</table>

Draw your chosen horizon in the space below.
Lesson content: Maths

**Homework:**
- Pupils can complete their bar charts at home if they did not manage to do so during lesson time.

**Success Criteria:**
- I can answer question based on data from a frequency table.
- I can create my own bar chart using data, including a title, labels and a key.

**Learning Objectives:**
- Using data to answer questions.
- Using data to visually present information.
- Making observations and comparisons regarding data findings.

**Key words:** Data, Bar Chart, Increase, Decrease, Pie Chart

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**Lesson activity**

- To introduce the lesson and give an early indication of the importance of visually presenting data in graph form, conduct a very quick human scatter graph – asking pupils their favourite food from the following selection: pasta, pizza, sausages and mash or roast dinner.
- Pupils should move to positions in the classroom according to their choice (and assigned by the teacher).
- Once they have completed this activity, hold a short discussion asking them how this visual representation is better than seeing figures in a frequency table.

**Task 1:**
**Analysing data**

- Explain that this lesson is based around (imagined) data from The London Eye which relates to visitors to The London Eye and their country of origin.
- Discuss reasons this might be important information for The London Eye operators to know (show slides 2-3).
- Now using Worksheet 1 and slides 4-5, ask pupils to work their way through the questions.
- Once all pupils have completed this task, run through the answers on slides 6-8.

**Task 2:**
**Drawing a bar chart**

- If time permits, distribute Worksheet 2 and ask pupils to plot their own bar chart using the data on the worksheet (also shown on slide 10). The bar chart on slide 9 (showing findings from 2012) can be used as an example of how to set out a bar chart.
- Any pupils that complete this quickly can be encouraged to present the data in a pie chart. Slide 11 shows an example of how data might look in pie chart form.
Lesson activity

- Show pupils slide 12 and ask what is wrong with this bar chart (missing labels, title etc)
- Pupils should now be asked to suggest reasons why data might be presented in the form of bar charts, pie charts or other (it is an effective way to show comparisons enabling you to see - at a glance - data findings) but that in order to be useful, it must be created and labelled correctly

Adaptation for Key Stage 1

- **Task 1:** younger children can attempt questions 1 and 2 in Task 1. Worksheet 1 (KS1) sets out some simpler questions which can be used with the data
- **Task 2:** in order to attempt Task 2, the 2014 figures can be changed to multiples of 10 (no greater than 200). Pupils could then use this data to create a pictograph with each symbol representing 10 people
Worksheet 1 (KS1): London Eye visitor data

Name: ___________________________________________  Class: ____________

**Learning objective:** Can I use information from a table to answer questions?

The chart shows how many visitors to The London Eye came from each of the following countries; France, Spain, Germany, Italy, UK or other in 2012 and 2013. Use this information to answer these questions.

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
<th>Italy</th>
<th>UK</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>157</td>
<td>75</td>
<td>120</td>
<td>83</td>
<td>265</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>55</td>
<td>99</td>
<td>190</td>
<td>61</td>
<td>345</td>
<td>50</td>
</tr>
</tbody>
</table>

1. Which country had 99 visitors in 2013?
2. If France had five more visitors in 2013, how many would they have?
3. Which country had the fewest visitors in 2012?
4. Which country had 265 visitors in 2012?
5. If in 2014 Spain had two more visitors, how many would it have?
6. Which country had more visitors in 2012, Spain or Italy?

The data used in this lesson is fictional.
Learning objective: Can I use information from a table to answer questions?

<table>
<thead>
<tr>
<th></th>
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<th>Italy</th>
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</tr>
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</table>

London Eye visitor figures
During each rotation, The London Eye can hold a maximum of 800 people. The above chart shows how many visitors came from each of the following countries; France, Spain, Germany, Italy, UK or other in both 2012 and 2013 during one rotation.

Use the information on the table to answer the following questions.

1. In 2013 where did the greatest number of people visit from? France
2. In 2012 where did the least number of people visit from? Italy
3. Which country saw the biggest increase in visitors in 2013? Germany
4. How many countries saw a decrease in visitors in 2013 compared with 2012? 2
   Can you name them? Spain, Italy
5. How many more visitors from Germany were there in 2013 compared with 2012? 70
6. How many fewer visitors were there from Italy in 2013 compared with 2012? 22
7. Which country saw the biggest decrease in visitors in 2013? Spain
8. Which country saw the biggest increase in visitors in 2013? Germany
Learning objective:
Can I draw a bar chart using information supplied in a table?
Using these figures for 2014 can you draw and plot your own bar chart?

Tip: how to draw a bar chart
- Draw two axis (across = horizontal, up = vertical)
- Write the numbers / categories on the two axis (the scale)
- Label the axis
- Plot the data on the graph
- Add a title

<table>
<thead>
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<th>Germany</th>
<th>Italy</th>
<th>UK</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>95</td>
<td>67</td>
<td>220</td>
<td>115</td>
<td>240</td>
<td>63</td>
</tr>
</tbody>
</table>

Don’t forget to title your bar chart

The data used in this lesson is fictional.