

Year 6 Handling Data 1 Answer My Questions (Core)

<p>Timing 3 or 4 sessions of approximately 45 minutes. Session 3 may take additional time for the children to collect, analyse and present their data. Also optional activity for further work / assessment</p>	<p>Children will</p> <ul style="list-style-type: none"> • Consider data and information about the Rio Olympics and link to 2020 Tokyo Olympics (in 2021 due to Covid-19) • Explore three different online databases • Compose questions to ask based on the databases • Answer questions set by their friends • Plan an investigation based on data online about the Olympics or other topic • Select information to present to the rest of the class • (Plan an investigation for the 2020 Olympics)
<p>e-safety links</p> <p>I protect my computer or device from harm on the Internet.</p> 	<p>Objectives</p> <p>Handling Data</p> <ul style="list-style-type: none"> • I can plan the process needed to investigate the world around me. • I can select the most effective tool to collect data for my investigation. • I use the skills I have developed to interrogate a database. • I can interpret the data I collect. • I can present the data I collect in an appropriate way.
<p>Links to other learning</p> <p>Computing: Multimedia – present data; Technology in our Lives – searching database online. Mathematics: Interpret tables to present and understand information.</p>	
<p>Resources</p> <p>Google Google Earth Baby names J2E Countries Database Data Handling Poster.</p>	<p>Preparation</p> <p>Download Data and Information presentation Set short cut to this Google search (You may want to identify a different Google search for session 3 and 4) Set short cuts to these online databases for children to interrogate:</p> <ul style="list-style-type: none"> • https://babynames.net/ • https://www.j2e.com/data/examples/countries • Make sure Google Earth has been installed on devices (will need full Google Earth not App) <p>Decide which pairs should use which database for session 2. Print out copies of investigation plan – one for each group or pair. Children will benefit from previously doing Year 5 Technology in our Lives 2.</p>

1	<p>Handling Data</p> <p>I can interpret the data I collect.</p>	<p>What is data and what is information?</p> <ul style="list-style-type: none"> • Paired talk: What is data and what is information? • Work through slides 1 - 8 data and information presentation. Tell the children to whisper in pairs to say what the numbers are? Tell them to write down their guess on a piece of paper or whiteboard after each slide. • Discuss which slide turned the data into information. When was there sufficient context to understand the data? (Make link to Tokyo Olympics 2020, held in 2021.) • Ask the children to talk about what knowledge they have gained. • Show children the Google search that was used to obtain the information. Talk about Google as being a giant database. It crawls across the World Wide Web, copies information and brings it back to be stored on its own servers for searching. • Try changing the search to other events eg 100m Rio 2016 final, Team dressage equestrian Rio 2016. • What information can you find out? • Ask children in pairs to use the Google search to find data (keep a note of the context for it to be information). • Have a class guessing game. Can children work out what the data is that different pairs have collected? • Paired talk: What is data and what is information? What knowledge have you gained? 	<p>Gold: Can I tell you the difference between data and information?</p> <p>Silver: Can I identify what is data and what is information?</p> <p>Bronze: Can I tell you about information I have found out?</p>
2	<p>Handling Data</p> <p>I use the skills I have developed to interrogate a database.</p>	<p>What can you find out?</p> <ul style="list-style-type: none"> • Tell the children you have identified three online databases for them to use. • Ask the children to work in pairs looking at Google Earth, Baby Names and J2E Countries Database. Which database do you need to be cautious with? (<i>Adverts and links from Baby Names.</i>) • What can you find out from these three databases? What is the same about them? 	<p>Gold: Can I interrogate different databases and set interesting questions for my friends to investigate?</p> <p>Silver: Can I ask interesting questions based on information</p>

		<p>What is different?</p> <ul style="list-style-type: none"> • Split the class into three. Each third to work in pairs looking at one of the databases. What fields can they identify? • Challenge the pairs to come up with questions (and keep a record of the answer) for others to investigate. • After 15 minutes, swap the questions between groups for their friends to answer. As children find the answer, swap questions again. Each pair is to keep the answers they discovered. • After 15 minutes, stop for children to check the answers they have found. • How did you find your answers? What skills did you need to use? 	<p>available in a database?</p> <p>Bronze: Can I tell you about the information I can find out from a database?</p>
<p>3/ 4</p>	<p>Handling Data</p> <p>I can plan the process needed to investigate the world around me.</p> <p>I can select the most effective tool to collect data for my investigation.</p> <p>I can interpret the data I collect.</p> <p>I can present the data I collect in an appropriate</p>	<p>Present your facts</p> <ul style="list-style-type: none"> • Tell the children they are going to plan their own investigation. They can use Google (limited to Rio Olympic searches OR choose a different appropriate search focus to fit with other learning), Google Earth, BabyNames or J2E Countries Database. Allow each pair to decide which database they would like to use. • <u>Slides 9 – 12 of presentation.</u>- Talk through the process of an investigation. <ul style="list-style-type: none"> ○ Identify problem or question for investigation ○ Plan the investigation: <ul style="list-style-type: none"> ▪ What data do I need to collect? (Or is it available online) ▪ Where and how will I collect it? (in this situation it will be online) ▪ How will I record it? ▪ What will I use to present it? ○ Collect the data ○ Process and analyse the data 	<p>Gold: Can I interpret the information in a database and present it in an interesting way for others?</p> <p>Silver: Can I find interesting facts when I interrogate a database?</p> <p>Bronze: Can I tell you something I have found out from a database?</p>

<p>way.</p>	<ul style="list-style-type: none"> ○ Share the data as information with others ● Let pairs or small groups decide what problem or question(s) they would like to investigate? BabyNames or Greenfield Road are the simplest resources to use for a more limited investigation for learners that might find difficulty using Google Earth or the Olympic searches in Google. ● Give each group or pair an investigation plan template. Guide the children as required to complete plan. Talk about the tool they will use to record data. They might make a database or use a spreadsheet. ● Make sure each pair considers how they will present the information they discover. ● Give children time to collect data from the website they choose and add to appropriate database or spreadsheet software/app. ● Children will need to process the data – creating appropriate graphs or tables. They will analyse what they have found out. ● Each group/pair will need time to present the data and then to share with the rest of the class. The information can be shared on school website or in a class blog. ● Look at this Data Handling Poster. What are the similarities and differences to slide 12? (Draw out the recognition that an enormous wealth of data is now available – link to online safety and looking after our own personal data.) 	
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Optional additional investigation / assessment opportunity: Plan an investigation for the 2020 Olympics, held in 2021 due to Covid-19.

- What data would give us information about the next Olympics and those taking part? What data could be available during and after the next Olympics?
- Ask children to identify a question/problem they would like to investigate. In pairs or groups let the children independently plan an investigation that they could choose to carry out during the next Olympics.