

Tomorrow's World



These activities are for you to do at home. You can do all of them or choose the ones that you find most interesting.

Activities

1. Alexander Graham Bell patented the telephone in 1876. Telephones have advanced in many ways since this date. Research the telephone's development using the internet or information books and create a clear chronological timeline showing your findings. Include illustrations, explanatory notes and dates.
2. Use a range of sources to find out about a technological advancement that interests you. Examples include computers, the internet, robots, renewable energy technology, X-ray cameras and CT scanning. Create a mind map to organise and record your findings under headings of your choice, then use your mind map to write a non-chronological report. Include a title, an opening paragraph, subheadings, detailed and interesting facts, precise topic vocabulary and images with captions.
3. Choose two significant developers or inventors. Examples include Bill Gates, Tim Berners-Lee, Sheryl Sandberg, Susan Wojcicki, Mark Zuckerberg or Julielynn Wong. Find out about and record their contributions to the technological world. Whose contribution do you think is the most important? You might like to create a presentation to present your findings to family or friends.
4. Visit the kid's website DKfindout! Navigate around the website, exploring some of its webpages on various subjects. Evaluate the purpose and effectiveness of the website by answering the questions.
 - What is the purpose of this website and why was it created?
 - Who is this website aimed at, and how have the developers made it suitable for their audience?
 - What features are effective on this website, and why?
 - Imagine that you are a developer for this website. Is there anything that you would add or change to improve the website?

Visit the website National Geographic Kids, and explore its webpages. Then, answer the questions.

- How is this website similar to the DKfindout! website?
- How is this website different from the DKfindout! website?
- Which website do you prefer? Why?

5. Talk with a family member about rules for online safety. Visit the UK Safer Internet Centre's website and read the SMART rules for using the internet. Afterwards, use what you have learned to create a poster to encourage people to stay safe online, explaining how they can achieve this.

6. A drone is a small aircraft that is controlled by somebody on the ground. The military use drones for surveillance tasks. Who else might use drones, and for what purpose? Make a list of tasks that drones could do, then answer the questions.

- How do drones performing these tasks benefit people, businesses or the environment?
- What might be the negative aspects of using drone technology?

Write a newspaper article giving a reasoned argument for the use of drones. Include a headline, the date, a byline and relevant facts.

7. List robotic or programmable devices found in the home, in the local area and the wider world. Examples include heating thermostats, traffic lights and bomb disposal robots. Then, write a summary to explain how these devices have improved the lives of people who use them.

8. Find out about the latest robotic technology inventions, such as RoboSimian, Ai-Da Robot, Pepper of SoftBank robotics and the robots made by the company Phoneix Control Systems Limited. Think about how technology and robots can change and improve what humans can achieve. Design and invent a device or robot that could carry out a task that you think would be necessary for the future. Write a paragraph to explain what your robot is called and can do. Write another paragraph to explain its impact on people, a business, the environment, or the world.

9. Think of a simple household task, such as making a sandwich or cup of tea. Decide on your task and then write a program (set of precise instructions) for completing the task – don't miss any necessary steps! Present your program to a family member and ask them to follow the instructions. Debug any errors to ensure that they can complete the task successfully.
10. Finish your home learning by writing a summary of the topic, explaining what you have learned about technological devices, robots and programs.

Useful websites

DKfindout! – Invention of the telephone – Telephone Facts

Britannica Kids – Technology and Invention – Homework Help

BBC Bitesize – Ten amazing scientific and technological breakthroughs of the 2010s

BBC News – Five robots that are changing everything

BBC Four – Hyper Evolution: Rise of the Robots

BBC Bitesize – What makes a good webpage?

BBC Bitesize – Computer science – KS2 Computing

Good reads

Title	Author	ISBN
The Impact of Technology in History and Archaeology	Alex Woolf	9781406298734
National Geographic Kids: Everything Robotics: All the Robotics Photos, Facts, and Fun	Jennifer Swanson	9781426323317
STEM Starters For Kids: Robotics Activity Book Robots and the programming that makes them go!	Jenny Jacoby	9781912909070
100 inventions that made history – Brilliant breakthroughs that shaped our world	DK	9781409340980
Understanding Computer Safety	Paul Mason	9781406289770