

Skill Scan

A smart way to assess courses and jobs

Predict

- 1 | Look at the job profiles. Discuss which one appeals the most and least.
- 2 | Predict which GCSE subjects you think are most likely to help you build the skills you need for each role.

Investigate

- 1 | Look at the skills used in one of the roles. Compare this with the skill summaries for each of the GCSE subjects.
- 2 | Which GCSEs would help you to build the skills you need in this role? Try looking at another role.

Reflect

- 1 | Did anything surprise you?
- 2 | Has this affected your thoughts about which GCSEs would suit you?
- 3 | Did you know about the apprenticeship, T-level and higher technical qualifications you could do to get into these areas of work?

Plan

- 1 | How can I support my child to explore work-based learning options?
- 2 | How can I support my child to apply for work-based learning opportunities?

Subject Profiles

The list of level 2 subjects below give examples of how some key skills are used in that subject.

Art

Creating something new: Creating a collage by combining photos, magazine clippings, and drawings to represent personal identity.

Attention to detail: Looking carefully to explore different artistic techniques such as testing different paintbrush sizes and applications to get the perfect texture for a tree's bark in a landscape painting.

Speaking and listening: Having a range of ways to communicate such as adding notes and sketches in an art journal to explain how the idea for a sculpture has changed over time, using specific art terms.

Research: Visiting museums and galleries to learn about artists such as looking at famous street art styles to inspire a project on urban culture and choosing techniques from different artists.

Business Studies

Critical thinking: When analysing a company's financial data, thinking critically to determine whether the business is profitable and identify potential areas for improvement.

Research: Investigate competitors' pricing strategies to understand how businesses attract customers and adjust their prices accordingly.

Analysis: By examining sales data from the past year, evaluating trends and predicting future growth opportunities for a business.

Data handling: Using cash-flow forecasts to track how much money is coming into and going out of a business, ensuring financial stability.

Problem solving: When faced with declining sales, brainstorming and implementing solutions such as promotional offers or product improvements, to increase revenue.

Planning: Developing a detailed business plan for a fictional company, outlining goals, strategies, and the steps needed to achieve them.

Drama

Creating something new: Collaborating with classmates to create an original scene about friendship for a school play.

Public speaking: Acting as the lead character in a class production of "Romeo and Juliet."

Teamwork: Supporting classmates during rehearsals by giving feedback and adjusting performances to improve the final production.

Analysis: Watching a recording of your class play and discussing how to improve the timing and delivery of lines.

Reading and analysing texts: Studying the script of "Macbeth" and discussing how the themes of power and ambition relate to its time period.

Research: Researching life in Victorian England to create accurate costumes and set designs for a period drama.

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Problem solving: Creating a design for a water bottle that is easy to carry and eco-friendly by using recyclable materials.

Teamwork: Collaborating with classmates to create a model of an eco-friendly house, each person focusing on different parts like energy efficiency, layout, or materials.

Time management: Creating a project timeline for designing a piece of furniture, setting deadlines for sketches, building the model, and testing.

Creating something new: Designing a new smartphone stand that can also charge devices wirelessly.

Research: Interviewing classmates and teachers to find out what they want in a new school backpack.

Planning: Drafting a design brief for a desk organiser, specifying materials, size, and the user's needs.

Food Preparation and Nutrition

Speaking and listening: During a group cooking challenge, presenting meal ideas, listening to feedback from peers, and adjusting the recipe based on group discussions.

Critical thinking: When choosing ingredients for a dish, thinking critically about dietary needs, such as selecting gluten-free options for someone with a gluten intolerance.

Research: Researching traditional meals from different cultures to understand how various ingredients and cooking methods are used.

Analysis: By evaluating the nutritional content of a recipe, determining if it meets the recommended dietary guidelines and making adjustments if needed.

Data handling: Comparing the cost of ingredients to manage a food budget while still creating a nutritious and delicious meal.

Problem solving: When a recipe isn't turning out as expected, experiment with different cooking method or ingredients to fix the issue and improve the final result.

Planning and Time management: Planning the cooking process carefully, ensuring there is enough time to prepare, cook, and present a meal within a given time frame.

Thinking about others: Consider the dietary needs and preferences of others when choosing recipes, ensuring that everyone can enjoy the meal.

Creating something new: Modify a traditional recipe, such as creating a healthier version of a classic dish by using lower-fat ingredients or alternative cooking methods.

Geography

Speaking and listening: Discussing geographical topics, sharing ideas or presenting your findings from research on issues such as climate change.

Critical thinking: Evaluating sources of information or debate topics like managing areas where there is high population density (too many people living in one space) or the impact of tourism on the landscape.

Research: Carrying out project work involves gathering information and could include building case studies such as the impact of a natural disaster.

Analysis: Examining a case study, interpreting data from graphs, maps or charts such as population pyramids or looking at how different factors affect climate change.

Data handling: Gathering data from project or fieldwork about coastlines and presenting or interpreting them in a range of graphs.

Problem solving: Finding solutions to geographical issues such as a resource shortage like water, energy or food.

Planning: Organising a fieldwork activity like what data to collect and how, or managing projects to make sure they are completed on time.

History

Public speaking: Giving a presentation to the class about the causes of World War I, explaining how alliances and conflicts escalated into a global war.

Discussion and debate: Discussing whether the Industrial Revolution had more positive or negative impacts on people's lives, using facts to support arguments.

Speaking and listening: Structuring a valid argument, for example: writing a clear timeline of events that led to the fall of the Roman Empire, and explaining it in a class discussion.

Critical thinking: Reading letters from soldiers in World War II and questioning what the letters reveal about their experiences and how it differs from textbooks.

Media

Creating something new: Producing original media work such as filming and editing a short video advertisement for a school event.

Analysis: Comparing two newspaper articles to see how they report the same news story differently.

Critical thinking: Discussing how social media shapes opinions about current events, and how algorithms affect what people see online.

Modern Foreign Languages

Speaking and listening: Talking with classmates in French about weekend activities, asking questions, and giving answers.

Thinking about others: Learning about Spanish festivals, like La Tomatina, and discussing their cultural significance.

Problem solving: Reading a French email about holiday plans and figuring out when and where the event will take place.

Reading and analysing text: Reading a German short story and figuring out how the characters' past actions affect their future choices.

Public speaking: Answering questions in Spanish during a mock exam, using correct vocabulary and grammar to express opinions.

Discussion and debate: Debating in French whether school uniforms should be mandatory, giving reasons for and against the idea.

Music

Creating something new: Composing a piece of music that starts with a classical melody but adds modern electronic sounds to create a unique style.

Teamwork: Playing in a school band, where each instrument is coordinated to create a balanced sound for a concert performance.

Time management: Creating a practice schedule leading up to a school music recital, allocating time to work on both solo and group pieces.

Analysis: Listening to a Beethoven symphony and breaking it down into sections, discussing how dynamics and tempo affect the mood of the piece.

Critical thinking: Comparing two versions of a jazz standard and evaluating how different instruments and arrangements change the feel of the song.

PE

Problem solving: Changing tactics in a football game to take advantage of the other team's weak defence.

Teamwork: In a basketball game, passing the ball strategically to create scoring opportunities for the team.

Thinking about others: Learning about how gender, age, and cultural differences influence participation in sports.

Data handling: Recording how fast a runner finishes a race and using that data to adjust their training routine.

Analysis: Watching a video of a gymnastic routine to identify and correct mistakes in technique.

Psychology

Thinking about others: Studying how peer pressure affects decision-making in teenagers, such as choosing whether to join a group activity or not.

Discovering an answer: Running an experiment to see if playing calming music reduces stress levels during tests, then analysing the results.

Critical thinking: Reading about different theories of personality and deciding which one best explains the behaviour of people in a case study.

Research: Researching how technology use before bed impacts sleep quality by reading scientific articles and summarising key points.

Analysis: Analysing the results of a memory test to find patterns and explain why some people remember more details than others.

Religious studies

Critical thinking: Discussing whether actions or intentions are more important in determining if something is morally right.

Discovering an answer: Forming well-structured arguments about religious ideas such as writing an essay about how different religions view life after death.

Thinking about others: Exploring how religious beliefs shape celebrations like Eid or Christmas.

Analysis: Analysing the reasons behind fasting in various religions and how it affects followers

Sociology

Problem solving: Investigating why certain communities have higher crime rates and suggesting ways to improve community safety.

Thinking about others: Studying how different social groups, such as teenagers or elderly people, are represented in the media.

Speaking and listening: Engaging in a classroom discussion about how social class affects educational opportunities, whilst listening to differing views.

Analysis: Analysing survey data to explore the link between income levels and access to healthcare.

Nursing Associate

A nursing associate works in various healthcare settings like hospitals, clinics, and GP surgeries, supporting patient care under the supervision of registered nurses. They assist with personal hygiene, and feeding, monitor patient conditions, take vital signs, and report changes. They also perform clinical tasks like wound care and administering medications.

Skills

Research: Research is key to staying updated on the best practices in patient care, such as infection control or new treatments. For example, researching methods to prevent bedsores can improve care in a nursing home.

Teamwork: Collaborating with nurses, doctors, and physiotherapists is important for providing comprehensive care. For example, you might work with physiotherapists to support a patient's rehabilitation.

Speaking and Listening: Clear communication is essential when discussing care plans or updating patients and families. For instance, explaining a medication schedule to an elderly patient requires both speaking clearly and listening to their concerns.

Attention to Detail: Sharp attention to detail is very important as even minor errors can have serious effects. Recording vital signs or administering medication accurately ensures patient safety. For example, noticing a small change in heart rate could highlight a critical issue needing immediate care.

Thinking About Others: Creating a compassionate care environment means understanding the needs of patients and meeting those needs.

Example route in:

You could complete a level 2 or 3 healthcare support apprenticeship or a T-level in health and progress to a level 5 nursing associate apprenticeship.

With this qualification and experience, you could progress to a level 6 (degree level) apprenticeship and become a registered nurse.

Ecologist

Ecology covers the relationships between plants, animals, people, and their environment, with certain aspects prioritised due to rarity, cultural significance, or commercial value. Ecologists play a critical role in balancing economic development with environmental preservation, striving for 'win-win' outcomes. Their responsibilities include analysing scientific data, developing and implementing surveys, writing reports, and proposing environmentally sound solutions for development projects.

Skills

Speaking and Listening: Strong communication skills are needed to share research with diverse audiences, like scientists or policymakers. For example, explaining deforestation data to government officials can help shape policy.

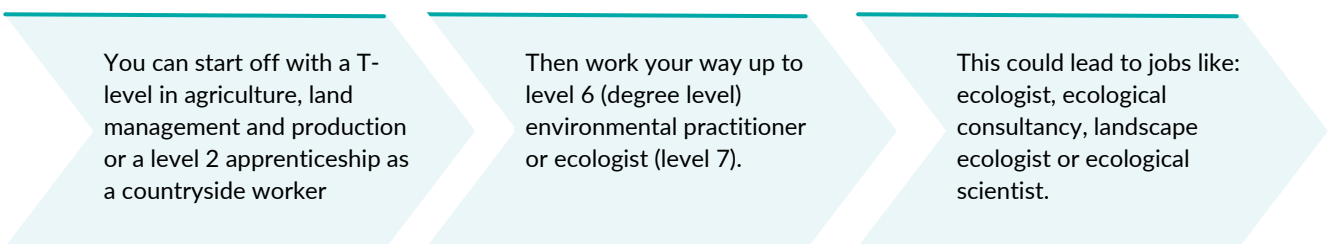
Data Handling: Handling data is crucial for ecologists who collect and analyse information during fieldwork, such as tracking species or monitoring soil quality. For example, an ecologist may track temperature changes to identify climate trends. Clear data presentation helps them communicate findings effectively and support conservation efforts.

Thinking About Others: Ecologists need to consider the impact of their work on local communities, ensuring that conservation efforts benefit both the environment and the people who rely on it.

Analysis: Ecologists analyse data to draw meaningful conclusions, like identifying the causes of coral reef damage through water temperature and pollution data.

Problem-Solving: Ecologists often face unpredictable challenges, like controlling invasive species without harming native wildlife. They must adapt quickly to changing conditions and think creatively to solve problems.

Example route in:



Robotics Engineer

Robotics engineers design and build machines that do automated jobs in industries like manufacturing, aerospace, deep ocean research and medicine. Careers in the engineering and computing sectors are some of the fastest growing across the world.

Skills

Create something new: Robotics Engineers design automated systems using computer software. For example, programming drone deliveries. Aerospace engineers design robots to perform tasks like drilling, painting and building aircraft.

Problem-solving: Creating prototypes and finding solutions to fix faults is an important part of the design process. This could be linked to space exploration with satellites and rockets or mechanical welding arms for building cars.

Analysis: Analysing data from robot sensors to instruments and cameras is a key part of this role. For example, in medical situations where surgeons use robotics to conduct highly delicate surgery.

Attention to detail: Spotting risks, issues and project progress must be communicated in reporting – for example, risks and problems with driverless cars.

Research: Robotics Engineers must keep up to date with new ways to use robots and artificial intelligence – for example in cyber security.

Example route in:

To start a career in robotics, you could complete a level 3 development technician apprenticeship or a T level in engineering and manufacturing.

Or get a level 4 Higher Technical Qualification in space engineering or a level 6 robotics engineer apprenticeship.

Develop your skills

Explore some of these ideas about how you could develop your skills.

Problem solving

- Take part in a competition or hackathon.
- Join a chess club.
- Complete or design puzzles.
- Teach yourself to code.
- Start a project, building a bird house, spice rack or desk organiser from scrap materials, solving problems along the way.

Analysis

- Do some virtual work experience with [Springpod](#) .
- Learn to use CAD or create technical drawings.
- Set up experiments that allow you to track your findings. For example, growth of a plant or levels of rainfall.
- Give feedback to a sports team after watching their performance.
- Join or set up a book or film club.

Research

- Do some factual writing about something you are really interested in – create a fact sheet, blog or article for the school magazine/newspaper/website.
- Read and learn about people who have started businesses, look at websites like the Young Entrepreneurs Academy.
- Enrol onto free online learning courses.
- Find out about your family tree or the history of your local area.

Creating something new

- Design a website.
- Teach yourself to code and use it to design something.
- Model making.
- Help with DIY or decorating at home or in a community centre.
- Design and make jewellery or hair accessories using natural materials e.g. small pebbles, leaves or bark from a tree.
- Write short stories or poems or create some illustrations for your favourite books.

Speaking and listening

- Volunteer for a community service.
- Join or set up a debating club or society.
- Teach someone else a skill you are good at.
- Help organise and run school events, such as a bake sale or a sports day.
- Join a youth advisory board with a charity or your local council.
- Learn British Sign Language or a foreign language.

Attention to detail

- Practice hair skills/styles on friends and family, braids, plaits, etc and photograph the journey to create a portfolio of your work.
- Build scale models or assemble intricate puzzles.
- Practice editing and proofreading essays, articles, or other written content for errors and clarity.
- Keep a daily journal.

Planning

- Use a daily planner or check lists to organise schoolwork, extracurricular activities, and personal tasks.
- Help to organise an event e.g. a fundraiser.
- Set short-term and long-term goals and create action plans.
- Calculate the cost of a fictitious event and find ways of saving money to fit different budgets.
- Start a project – plan the steps, track your progress and review.

Teamwork

- Join an after-school club.
- Take up a team sport like football or hockey.
- Set up a revision or homework group.
- Do some community volunteering or join an action group.
- Sing in the school choir or form a singing group.

Thinking about others

- Help out at a residential home or community centre.
- Interview someone to write a 'day in the life' article.
- Keep a 'good deed' or 'helping hand' log.
- Help younger children with homework or reading.
- Collect items for charity or help with fundraising.