

KEY SKILLS

Problem solving Level 1

The key skills are the skills which are most commonly needed to succeed in a range of activities – at work, in education and training and in everyday life. In developing the key skill of problem solving, you will learn to use and adapt your skills confidently and effectively in a range of settings and contexts.

Progression

The key skills qualifications are designed to enable you to progress at your own pace. Each level of the key skill above level 1 incorporates and builds on the previous ones. The key skills qualifications not only recognise your current capabilities, they also require you to identify how you can further improve your skills to meet new demands at higher levels.

Part A

YOU NEED TO KNOW HOW TO

This section tells you about the techniques and knowledge associated with each key skill. It tells you what you need to learn and practise to feel confident about applying these skills in your studies, work or other aspects of your life.

Part B

YOU MUST

This section builds on Part A and describes the application of skills. It describes the skills you must show. All your work for this section will be assessed. You must have evidence that you can do all the things listed in the bullet points.

To achieve Problem Solving at level 1 you must be able to apply your skills to suit different purposes. You will show that you can:

- understand the problem you have been given to solve
- decide how you will try to solve the problem
- check what you need to do to improve your problem solving skills.

Part A

YOU NEED TO KNOW HOW TO:

Confirm you understand the given problem and identify ways to tackle it

Work with an appropriate person, such as your tutor or supervisor, to:

- check that you clearly understand the problem:
 - ask questions about the problem and find out how it might affect you and other people
- check how you will know the problem has been solved:
 - ask your tutor or supervisor about the results expected from tackling the problem
- come up with different ways of tackling the problem:
 - learn about different methods for solving problems
 - get ideas about what could be done by looking at similar problems
 - decide what could work for your problem.

Confirm what you will do and follow your plan for solving the problem

Work with an appropriate person, such as your tutor or supervisor, to:

- help decide how you will try to solve the problem by saying what you think and taking your tutor or supervisor's advice
- plan what you need to do:
 - identify how long it should take and any materials, tools and equipment you will need
 - list your methods and steps for working through the problem
 - check the rules for health and safety and how to use materials, tools and equipment
 - identify what to do if things go wrong
- follow your plan, making sure you work safely
- use support given by your supervisor, or others named by your supervisor, to help you tackle the problem.

Check if the problem has been solved and how to improve problem solving

Work with an appropriate person, such as your tutor or supervisor, to:

- make sure you understand how to use the methods you have been given for checking if the problem has been solved
- use these methods as instructed
- identify clearly what went well and less well in tackling the problem:
 - describe what happened, the order in which things happened, unexpected difficulties
- check what you need to do to improve your problem solving skills for each stage of the process.

Problem solving: level 1

Part B

YOU MUST:

You must:

Provide at least **two** examples of meeting the standard for PS1.1, PS1.2 and PS1.3. (**Each** example should cover a different problem and identify at least **two** different ways of tackling it (for PS1.1).)

PS1.1

Confirm with an appropriate person that you understand the given problem and identify different ways of tackling it.

Evidence must show you can:

- 1.1.1 check that you clearly understand the problem you have been given
- 1.1.2 check how you will know it has been solved
- 1.1.3 come up with different ways of tackling the problem.

PS1.2

Confirm with an appropriate person what you will do and follow your plan for solving the problem.

- 1.2.1 help decide how you will try to solve the problem
- 1.2.2 plan what you need to do
- 1.2.3 follow your plan, working safely and using support given by others to help tackle the problem.

PS1.3

Check with an appropriate person if the problem has been solved and how to improve your problem solving skills.

- 1.3.1 check if the problem has been solved using the methods you have been given
- 1.3.2 identify clearly what went well and less well in tackling the problem
- 1.3.3 check what you need to do to improve your problem-solving skills.

EXAMPLES AND GUIDANCE

The following gives further guidance and examples of the techniques and knowledge in Part A.

CONFIRM YOU UNDERSTAND THE GIVEN PROBLEM AND IDENTIFY WAYS TO TACKLE IT

Check you understand the problem by asking questions about what happened, how the problem affects other people in their work.

Come up with different ways of tackling the problem by looking at different parts of the problem, asking others who may have solved similar problems.

CONFIRM WHAT YOU WILL DO AND FOLLOW YOUR PLAN FOR SOLVING THE PROBLEM

Plan what you need to do by writing a list of tasks in order, working out the time and resources needed.

Follow your plan, and use support from others by obtaining information or resources from them.

CHECK IF THE PROBLEM HAS BEEN SOLVED AND HOW TO IMPROVE PROBLEM SOLVING

Use identified methods for checking the problem has been solved by testing, observing, asking others.

Check what you need to do to improve your problem solving skills when finding out about the problem, following the plan, checking the problem has been solved.

For further examples and guidance on the key skills standards please refer to *The Key Skills Standards and Guidance* (order ref: QCA/04/1272).

Help with producing evidence

If producing certain types of evidence is difficult for you because of a disability or for another reason, please discuss this with your tutor or supervisor. It may be possible for you to produce evidence using alternative methods. Depending on the skill and level, these may include use of a scribe (amanuensis); Braille, voice activated software and British Sign Language. Detailed guidance is available in the document *Basic and Key Skills: Guidance for candidates with Particular Requirements* published by the Joint Council for Qualifications. This is available from your key skills awarding body.

Please ask your tutor or supervisor for further guidance.

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