



## KEY SKILLS

## LEVEL 2 PROBLEM SOLVING

## CANDIDATE WORKBOOK

Centre Number: .....

Centre Name: .....

Candidate Number: .....

Candidate Name: .....

## **Part A: These are the skills you need to know before you can begin to complete this Workbook**

### **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.

## Part B: The Problem Solving Process at Level 2

You have to show you can tackle TWO DIFFERENT problems.

**Your evidence in this Workbook must show you can:**

### PS2.1

**Identify a problem, with help from an appropriate person, and identify different ways of tackling it.**

1. Provide information to help identify a problem, accurately describing its main features.
2. Identify how you will know the problem has been solved.
3. Come up with different ways of tackling the problem.

### PS2.2

**Plan and try out at least one way of solving the problem.**

4. Confirm with an appropriate person how you will try to solve the problem.
5. Plan what you need to do, identifying the methods and resources you will use.
6. Use your plan effectively getting support and revising your plan when needed to help tackle the problem.

### PS2.3

**Check if the problem has been solved and identify ways to improve problem solving skills.**

7. Check if the problem has been solved accurately using the methods you have been given.
8. Describe clearly the results, including the strengths and weaknesses of how you tackled the problem.
9. Identify ways of improving your problem solving skills.

## TO THE CANDIDATE

### REMEMBER:

- include any evidence with this *Workbook* that supports what you have done, such as photographs, 'witness statements', reports, minutes of meetings, audio/video recordings,
- ask your teacher or trainer for help if you are having difficulty producing your evidence or when completing this *Workbook*.
- acknowledge any help you receive from anyone other than your teacher or trainer along with information taken from books, leaflets, videos/CDs, the internet,
- the work you submit must be your own,
- if you copy from someone else or allow another person to copy from you, or if you cheat in any other way, you will be disqualified, at the very least, from this Key Skill.

### DECLARATION:

I HAVE READ AND UNDERSTOOD THE INFORMATION ABOVE. I HAVE ACKNOWLEDGED ANY HELP RECEIVED FROM ANYONE OTHER THAN MY TEACHER OR TRAINER.

Candidate Signature: .....

Date: .....



5. You will need to come up with different **ways** of tackling the problem. *The two ways should be clearly different approaches to tackling the problem and not just variations of the same basic method.* Describe the two ways you could tackle the problem. **[2.1.3]**

**Method 1:**

**Method 2:**

**PS 2.2**

6. Which of the two methods have you decided to use to try you solve the problem? **[2.2.1]**
7. Why have you chosen this method? **[2.2.1]**  
*You should show that you have considered possible risks and matters of health and safety.*
8. With whom have you confirmed which method you will use to try to solve the problem?  
*Say who this person is – tutor, instructor etc.* **[2.2.1]**

This person should sign, date and give details of status below:

**Signed:**..... **Status:**..... **Date:**.....

9. Now complete your action plan.

[2.2.2]

<b>ACTION PLAN - PROBLEM 1</b>	
What I need to do and how I will do it (Remember: Give detailed action points)	I aim to do this by this date

10. You will need materials/resources (including help/advice)to carry out your plan.[2.2.2]

- (a) What might you need?
  
  
  
  
  
  
  
  
  
  
- (b) How might to use these?
  
  
  
  
  
  
  
  
  
  
- (c) Where could you get these?

11. What difficulties could arise and how could you overcome them? [2.2.2]

Possible difficulties	How could you overcome the difficulty?

12. You will have needed support as you worked through your plan. Give details: [2.2.3]

Name & status of person giving support	When given	What was the support?	How did you use the support?

13. **Problem 1 - Learning Log** [2.2.3]

<i>Planned action point (See: Action Plan, Column 1)</i>	<i>Done on time?</i>	<i>What changes did you make if any?</i>	<i>Why did you make these changes?</i>

**PS 2.3**

- 14.** Using the methods you were given by your tutor/instructor (see: Question 4), check carefully if the problem has been solved. **[2.1.1]**

- 15.** Describe in detail the results of your attempt to solve the problem. **[2.3.2]**  
*You should comment on how things went, including things that did not go as expected.*

**16.** What were the strengths of how you tackled the problem? **[2.3.2]**  
*Remember, it is what you did in trying to solve the problem that is important.*

**17.** What were the weaknesses in the way you went about tackling the problem? **[2.3.2]**

**18.** Based on what you have done this time, suggest ways how could you improve your problem solving skills in future. **[2.3.3]**

## Problem 2

### PS 2.1

19. Who helped you identify your problem and what is his/her status? [2.1.1]
20. Describe the main 'features' of the problem. [2.1.1]  
*(Remember: 'Features' could be: how many parts there are to the problem; whether there are safety issues; will the problem change over time; how many people are involved/affected, etc.)*
21. How will you know the problem has been solved? [2.1.2]  
*You should discuss this with your tutor/instructor.*
22. What methods will you use to check it has been solved? [2.1.2]  
*Your tutor/instructor may show you methods for checking.*

23. You will need to come up with different **ways** of tackling the problem. *The two ways should be clearly different approaches to tackling the problem and not just variations of the same basic method.* Describe the two ways you could tackle the problem. [2.1.3]

**Method 1:**

**Method 2:**

**PS 2.2**

24. Which of the two methods have you decided to use to try you solve the problem? [2.2.1]

25. Why have you chosen this method? [2.2.1]  
*You should show that you have considered possible risks and matters of health and safety.*

26. With whom have you confirmed which method you will use to try to solve the problem? [2.2.1]  
*Say who this person is – tutor, instructor etc.*  
This person should sign, date and give details of status below:

**Signed:**..... **Status:**.....

**Date:**.....

27. Now complete your action plan.

(2.2.2)

<b>ACTION PLAN - PROBLEM 2</b>	
<b>What I need to do and how I will do it (Remember: Give detailed action points)</b>	<b>I aim to do this by this date</b>

28. You will need materials/resources (including help/advice)to carry out your plan.

(2.2.2)

(a) What might you need?

(b) How might to use these?

(c) Where could you get these?

29. What difficulties could arise and how could you overcome them? (2.2.2)

<i>Possible difficulties</i>	<i>How could you overcome the difficulty?</i>

30. You will have needed support as you worked through your plan. Give details: (2.2.3)

<i>Name and status of person giving support</i>	<i>When given</i>	<i>What was the support?</i>	<i>How did you use the support?</i>

31. **Problem 2 - Learning Log** (2.2.3)

<i>Planned action point (See: Action Plan, Column 1)</i>	<i>Done on time?</i>	<i>What changes did you make if any?</i>	<i>Why did you make these changes?</i>

**PS 2.3**

32. Using the methods you were given by your tutor/instructor (see: Question 22), check carefully if the problem has been solved.

**(2.3.1)**

33. Describe in detail the results of your attempt to solve the problem. **(2.3.2)**  
*You should comment on how things went, including things that did not go as expected.*

34. What were the strengths of how you tackled the problem? **(2.3.2)**  
*Remember, it is what you did in trying to solve the problem that is important.*

35. What were the weaknesses in the way you went about tackling the problem? **(2.3.2)**

36. Based on what you have done this time, suggest ways how could you improve your problem solving skills in future. **(2.3.3)**

## Part A Questions

*(Note to Assessor: Please refer to the WJEC Guidance before using these questions)*

**Your teacher or trainer may ask you some or all of these questions and record your answers.**

1. What have you learnt about identifying a problem and identifying different ways of tackling a problem?
2. What have you learnt about planning and trying out ways of solving problems?
3. What have you learnt about checking if a problem has been solved and identifying ways to improving problem solving?

## Feedback to the Candidate

Your teacher or trainer may use this page to record your progress

Feedback (specific to each criterion)

Action (including target dates)

## ASSESSMENT RECORD

**TO BE COMPLETED BY THE ASSESSOR**

**PLEASE REFER TO THE REGULATORS KEY SKILLS GUIDANCE DURING YOUR ASSESSMENT.**

Evidence required	Problem 1	Problem 2
<p><b>PS2.1</b></p> <p>Identify a problem, with help from an appropriate person, and identify different ways of tackling it.</p> <p>Evidence must the candidate can:</p> <p>2.1.1 provide information to help identify a problem, accurately describing its main features</p> <p>2.1.2 identify how they will know the problem has been solved</p> <p>2.1.3 come up with different ways of tackling the problem.</p>		
<p><b>PS2.2</b></p> <p>Plan and try out at least one way of solving the problem.</p> <p>Evidence must show the candidate can:</p> <p>2.2.1 confirm with an appropriate person how they will try to solve the problem</p> <p>2.2.2 plan what they need to do, identifying the methods and resources they will use</p> <p>2.2.3 use their plan effectively, getting support and revising their plan when needed to help tackle the problem.</p>		
<p><b>PS2.3</b></p> <p>Check if the problem has been solved and identify ways to improve problem solving skills.</p> <p>Evidence must show the candidate can:</p> <p>2.3.1 check if the problem has been solved by accurately using the methods they have been given</p> <p>2.3.2 describe clearly the results, including the strengths and weaknesses of how they tackled the problem</p> <p>2.3.3 identify ways of improving their problem solving skills.</p>		
<p><b>Two different ways identified to solve EACH problem?</b></p>		
<p><b>Following your assessment has the candidate 'Passed'?</b></p>		

I confirm that the above candidate's work meets the standard for this Key Skill and 'passes' the internal assessment. I also confirm that every reasonable step has been taken to ensure that the work presented is that of the candidate named.

Assessor: ..... Signature: .....

Date: .....

**To be completed by the Internal Moderator/Verifier (if applicable)**

I confirm that the internal assessment of this portfolio was sampled as part of the centre's internal quality assurance procedures and that relevant records, including feedback to the assessor, have been kept.

Internal Moderator/Verifier: ..... Signature: .....

Date .....