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| **Problem Solving** |
| **Level 2** |
| Candidate Name: |
| Candidate Number: |
| Course: |
| Assessor: |



Written to meet City and Guilds Wider Key skills standards

**Problem Solving level 2 standard**

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 B**

**You must:**

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

**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.

**To achieve Problem Solving at level 2, you must be able to apply your skills to suit**

**different purposes. You will show that you can:**

* Accurately describe the problem
* Plan what you need to do to solve the problem
* Identify way of improving your problem solving skills.

**Part A – you need to know how to:**

**Help identify a problem and identify different ways of tackling it**

* Work with an appropriate person, such as your tutor or supervisor, to help identify a problem, by providing an accurate description of its main features:
	+ What is known and not known about the problem
	+ How it affects you and other people
* Identify how you will know the problem has been solved:
	+ Find out the results people expect from tackling the problem
	+ Find out about methods you could use to check it has been solved
* Come up with different ways of tackling the problem:
	+ Learn about different methods for solving problems and how similar problems have been solved
	+ Find out about the risks (the likelihood of things going wrong) and other factors that might affect the way you tackle the problem (time and expertise needed, health and safety rules)
	+ Decide what could help to solve your problem.

**Plan and try out a way of solving the problem**

* Confirm with an appropriate person, such as your tutor, supervisor or other person in authority, how you will try to solve the problem, adapting your ideas if necessary to meet rules and regulations
* Plan what you need to do, identifying:
	+ Resources you will use (materials, tools, equipment, information and support from others)
	+ The methods, steps and time-line for working through the problem, including ways of overcoming difficulties
	+ Health and safety procedures
* Use your plan effectively, taking responsibility, when needed, for:
	+ Health and safety
	+ Getting support from your supervisor or other person with relevant expertise
	+ Keeping track of the steps taken in tackling the problem and revising your plan to deal with unexpected events.

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

* Learn how to use the methods you have been given for checking if the problem has been solved and use these accurately
* Describe clearly the results of your checking, including the strengths and weaknesses of how you tackled the problem at each stage
* Identify ways of improving your problem solving skills.

**Part B – you must:**

Provide at least two examples of meeting the standard for PS2.1, PS2.2 and PS2.3. **Each** example should cover a different problem and identify **at least two** different ways oftackling it (for PS2.1).

**Evidence must show you can:**

**PS2.1 - Identify a problem, with help from an appropriate person, and identify different ways of tackling it.**

**2.1.1** Provide information to help identify a problem, accurately describing its main features

**2.1.2** Identify how you will know the problem has been solved

**2.1.3** Come up with different ways of tackling the problem.

**PS2.2 - Plan and try out at least one way of solving the problem.**

**2.2.1** Confirm with an appropriate person how you will try to solve the problem

**2.2.2** Plan what you need to do, identifying the methods and resources you will use

**2.2.3** 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**

**2.3.1** Check if the problem has been solved by accurately using the methods you have been given

**2.3.2** Describe clearly the results, including the strengths and weaknesses of how you tackled the problem

**2.3.3** Identify ways of improving your problem solving skills.

**Assessor declaration:**

I declare that the details above are correct, that the evidence submitted is the candidate’s own work and that the candidate meets all of the requirements for this key skill.

Assessor’s name:……………………………………………..

Assessor’s signature:………………………………………. Date:…………………………………………..

Candidate’s name:……………………………………………

Candidate’s signature:……………………………………… Date:…………………………………………..

Internal Verifier’s name:……………………………………

Internal Verifier’s signature:…………………………… : Date:……………………………………………

**Note Part A coverage must also be confirmed (using Part A questions as necessary) before a qualification certificate can be claimed.**

PROBLEM SOLVING – LEVEL 2

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Provide at least two examples of meeting the standard for PS2.1, PS2.2 and PS2.3. Each example should cover a different problem and identify at least two different ways of tackling it (for PS2.1).

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| **COMPONENT** | **Example 1****Reference (s)** | **Example 2****Reference(s)** |
| **PS 2.1: Identify a problem, with help from an appropriate person, and identify different ways of tackling it** |  |  |
| **PS 2.1.1 : Provide information to help identify a problem, accurately describing its main features** |  |  |
| **PS 2.1.2: Identify how you will know the problem has been solved** |  |  |
| **PS 2.1.3: Come up with different ways of tackling the problem.** |  |  |
| **PS 2.2: Plan and try out at least one way of solving the problem.** |  |  |
| **PS 2.2.1: Confirm with an appropriate person how you will try to solve the problem** |  |  |
| **PS 2.2.2: Plan what you need to do, identifying the methods and resources you will use your plan effectively,** |  |  |
| **PS 2.2.3: Getting support and revising your plan when needed to help tackle the problem** |  |  |
| **PS 2.3: Check if the problem has been solved and identify ways to improve problem solving skills** |  |  |
| **PS 2.3.1: Check if the problem has been solved by accurately using the methods you have been given describe clearly the results,** |  |  |
| **PS 2.3.2: Describe clearly the results, including the strengths and weaknesses of how you tackled the problem** |  |  |
| **PS 2.3.3: Identify ways of improving your problem solving skills.** |  |  |

**Problem Solving Part A questions – Level 2**

Your assessor/tutor will advise which of the following you need to answer (normally all three). You will need to answer these as fully as possible giving examples:

**Section 1**

1. What have you learnt about identifying a problem and identifying different ways of

tackling a problem?

**Section 2**

1. What have you learnt about planning and trying out ways of solving problems?

**Section 3**

3. What have you learnt about checking if a problem has been solved and identifying

ways to improving problem solving?

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| ASSESSOR |  | CANDIDATE |  |
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**Problem 1**

PS 2.1

1. Who helped you identify your problem and what is his/her job role? (2.1.1)
2. 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.)*

1. How will you know if the problem has been solved? *You should discuss this with your assessor.* (2.1.2)
2. What methods will you use to check that your problem has been solved? *Your assessor may show you methods for checking.* (2.1.2)
3. You will need to come up with **different** **ways** of tackling your 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

1. Which of the two methods that you have discussed have you decided to use to try to help you solve the problem? (2.2.1)
2. Why have you chosen this method? *You should show that you have considered possible risks and matters of health and safety.* (2.2.1)
3. Who have you confirmed your method with? *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:………………***

1. Now complete your action plan. (2.2.2)

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| **Action Plan Problem 1** |  |
| **What do I need to do and how am I going to do it?** | **Planned completion date** |
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1. You will need equipment/ materials or resources (including help/advice)to carry out your plan. (2.2.2)
2. What might you need?
3. How might to use these?
4. Where could you get these?
5. What difficulties could arise and how could you overcome them? (2.2.2)
6. You will have used support as you worked through your plan. Give details(*2.2.3*)
7. ***Problem 1 - Learning Log*** (2.2.3)

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| **Action Point – Refer to the action plan.** | **Completed on time?** | **What changes were made?** | **Why were changes made?** |
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PS 2.3

1. Using the methods you were given by your tutor/instructor (see: Question 4), check carefully if the problem has been solved. Explain your findings. (2.3.1)
2. Describe in detail the results of your attempt to solve the problem. *You should comment on how things went, including things that did not go as expected.* (2.3.2)
3. What were the strengths of how you tackled the problem? *Remember, it is what you did in trying to solve the problem that is important.* (2.3.2)
4. What were the weaknesses in the way you went about tackling the problem? (2.3.2)
5. 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

1. Who helped you identify your problem and what is his/her job role? (2.1.1)
2. 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.)*

1. How will you know if the problem has been solved? *You should discuss this with your assessor.* (2.1.2)
2. What methods will you use to check that your problem has been solved? *Your assessor may show you methods for checking.* (2.1.2)
3. You will need to come up with **different** **ways** of tackling your 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

1. Which of the two methods that you have discussed have you decided to use to try to help you solve the problem? (2.2.1)
2. Why have you chosen this method? *You should show that you have considered possible risks and matters of health and safety.* (2.2.1)
3. Who have you confirmed your method with? *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:………………***

1. Now complete your action plan. (2.2.2)

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| **Action Plan Problem 2** |  |
| **What do I need to do and how am I going to do it?** | **Planned completion date** |
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1. You will need equipment/ materials or resources (including help/advice)to carry out your plan. (2.2.2)
2. What might you need?
3. How might to use these?
4. Where could you get these?
5. What difficulties could arise and how could you overcome them? (2.2.2)
6. You will have used support as you worked through your plan. Give details(*2.2.3*)
7. ***Problem 2 - Learning Log*** (2.2.3)

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| **Action Point – Refer to the action plan.** | **Completed on time?** | **What changes were made?** | **Why were changes made?** |
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PS 2.3

1. Using the methods you were given by your tutor/instructor (see: Question 4), check carefully if the problem has been solved. Explain your findings. (2.3.1)
2. Describe in detail the results of your attempt to solve the problem. *You should comment on how things went, including things that did not go as expected.* (2.3.2)
3. What were the strengths of how you tackled the problem? *Remember, it is what you did in trying to solve the problem that is important.* (2.3.2)
4. What were the weaknesses in the way you went about tackling the problem? (2.3.2)
5. Based on what you have done this time, suggest ways how could you improve your problem solving skills in future. (2.3.3)

**Evidence**

**Section**