

Level 1 Functional skills

TIME PLANS

Aim

Understand the importance of creating and using accurate time plans

Objectives

- Calculate the duration of different activities
- Work out the length of a working day / job / activity
 - Convert between hours and minutes

Name: _____

Start date: _____

L1 Functional Maths – Time Plans

Name _____ Date _____



Activity 1

Nicky owns a caravan park. She writes down what she needs to do tomorrow.

- help out in shop 12pm - 2.30pm
- tour of caravan park 11am and 4pm (each tour lasts 30 minutes)
- check stock in shop (30 minutes)
- work in reception (1 hour)
- check pool area before opening at 10am (30 minutes)
- check toilets (30 minutes)

* Lunch – 30 minutes

She wants to start work at 9am and finish her day by 5pm.

Make a time plan for Nicky's day. Don't forget lunch.

Will she also have time for a tea break? _____

Show your time plan clearly in the box provided below.

Include a start time and finish time for each task.



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Name _____ Date _____

Activity 2

Mr Woof takes his dog to see the vet.

The vet tells him to give his dog two different types of tablet each day.

Tablet A 	Take 1 tablet 3 times a day at regular intervals.
Tablet B 	Take 1 tablet 4 times a day at regular intervals.

Mr Woof needs to work out when to give his dog each tablet.

It is important that he leaves the same amount of time in between each tablet.

He plans to give each tablet to his dog when he gets up at 07:00.

He plans to give tablet A and B when he goes to bed at 22:00.

When should Mr Woof give the tablets to his dog? Clearly show a plan below.

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Name _____ Date _____



Activity 3

Sarah hires James to do some jobs at her house.

The information below shows the time James expects to take to do each job. It also shows the order he will do the jobs in.

Job	Time
Fit 2 small windows	45 minutes per window
Tea break	20 minutes
Cut down the trees	1 hour 10 minutes
Weed the garden	1 hour 30 minutes
Lunch break	45 minutes
Put up the shed	4 hours 30 minutes

James starts the first job at 9.30.

Write a job plan for James. Show **all the times**.

Your plan should include the time he starts and finishes each job.

L1 Functional Maths Time Plans Curriculum mapping

Source: DfE (Feb 2018), Subject content functional skills: mathematics <https://www.gov.uk/government/publications/functional-skills-subject-content-mathematics>



Subject content – Reformed FUNCTIONAL SKILLS MATHEMATICS 2018 (comes into effect September 2019)

✓ indicates main content and problem-solving skill(s) covered in this resource, although these will vary with the student group and how the resource is used by the teacher.
→ or ← = not covered but included to show progression across levels (content at each level subsumes and builds upon the content at lower levels).

Fundamental mathematical knowledge and skills

These must be demonstrated in their own right, **both with and without a calculator**, in addition to being used to solve problems or complete tasks.

Entry Level 1	Entry Level 2	Entry Level 3	Level 1	Level 2
Using numbers and the number system (N)				
Refer to: DfE (Feb 2018), Functional skills subject content: https://www.gov.uk/government/publications/functional-skills-subject-content-mathematics for Number & Number System content.				
N1-N4	N1-N11	N1-N9	N1-N17	N1-N12
Using common measures, shape and space (MSS)				
MSS 5	MSS 12	MSS 10-11	MSS 18-19	MSS 13-14
6. Read 12 hour digital and analogue clocks in hours → 7. Know the number of days in a week, months, and seasons in a year. Be able to name and sequence. →	13. Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock. →	12. Read, measure and record time using am and pm. ✓ 13. Read time from analogue and 24-hour digital clocks in hours and minutes. ✓	20. Convert between units of length, weight, capacity, money and time , in the same system. ✓	15. Calculate using compound measures including speed , density and rates of pay . ←
MSS 8-10	MSS 14-21	MSS 14-20	MSS 21-26	MSS 16-22
Handling information and data (HD)				
Refer to: DfE (Feb 2018), Functional skills subject content: https://www.gov.uk/government/publications/functional-skills-subject-content-mathematics for Handling Information & Data content.				
HD 11-13	HD 22-25	HD 21-23	HD 27-31	HD 23-28

Mathematical problem solving (at all levels of Functional Mathematics)

Although underpinning knowledge is tested in its own right, problem solving (p-s) is a core element of Functional Skills mathematics yet should not obscure or add additional mathematical complexity beyond the level of the qualification. Defining p-s is a challenge but the attributes below are helpful. Not all (in fact often just one) of the listed attributes must be present in a single task for it to be considered to be p-s. ✓ indicates why all or parts of this resource can be considered to be problem solving.

One or more of the following attributes may be present in a single task for it to be considered problem solving.

A Tasks that have little or no scaffolding: there is little guidance given to the student beyond a start point and a finish point. Questions do not explicitly state the mathematical process(es) required for the solution.	✓	B Tasks that provide for multiple representations, such as use of a sketch or a diagram as well as calculations.	✓
		D Tasks have a variety of techniques that could be used.	✓
C The information is not given in mathematical form or in mathematical language; or there is a need for the results to be interpreted or methods evaluated, for example, in a real-world context	✓	E The solution requires understanding of the processes involved rather than just application of the techniques.	✓

L1 Functional Maths Time Plans Curriculum mapping

Source: DfE (Feb 2018), Subject content functional skills: mathematics <https://www.gov.uk/government/publications/functional-skills-subject-content-mathematics>



Solving mathematical problems, carrying out tasks and decision making.

Entry Level 1 students are expected to be able to:	Entry Level 2 students are expected to be able to:	Entry Level 3 students are expected to be able to:	Level 1 students are expected to be able to:	Level 2 students are expected to be able to:
Use the content knowledge and skills to recognise a ¹ simple problem and obtain a solution			Use the content knowledge and skills to recognise and obtain a solution or solutions to a:	
E1a. Use given mathematical information and recognise and use simple mathematical terms appropriate to E1	E2a. E3a. Use given mathematical information including numbers, symbols, simple diagrams and charts		² straightforward problem. ✓	³ complex problem.
	E2b. Recognise, understand and use simple mathematical terms appropriate to Entry Level 2	E3b. Recognise, understand and use simple mathematical terms appropriate to Entry Level 3	L1a. L2a. Read, understand and use mathematical information and mathematical terms used at this level ✓	
			L1b. L2b. Address individual problems as described above ✓	
E1b. E2c. E3c. Use the methods given above to produce, check and present results that make sense [E3 only: to an appropriate level of accuracy].			L1c. L2c. Use knowledge and understanding to a required level of accuracy ✓	
E1c. Provide a simple explanation for those results.	E2d. Present appropriate explanations using numbers, measures, simple diagrams, simple charts and symbols appropriate to Entry Level 2.	E3d. Present results with appropriate explanation using numbers, measures, simple diagrams, charts and symbols appropriate to Entry Level 3.	L2d. Identify suitable operations and calculations to generate results	
			L1d. L2e. Analyse and interpret answers in the context of the original problem ✓	
			L1e. L2f. Check the sense, and reasonableness, of answers	
			L1f. Present results with appropriate explanation and interpretation demonstrating simple reasoning to support the process & show consistency with the evidence presented ✓	L2g. Present results and explain results clearly and accurately demonstrating reasoning to support the process and show consistency with the evidence presented

KEY: MCA = appropriate mathematical content area(s). NS = Using numbers and the number system. MS = Using common measures, shape and space. HD = Handling information and data.

¹A **simple mathematical problem** requires **working through one step or process**. At Entry Level it is expected that students will be able to address individual problems each of which draw upon knowledge and/or skills from **one MCA** (NS, MS or HD). **Context** should be familiar to all students and easily described.

²A **straightforward problem** requires students to either work through one step or process **or to work through more than one connected step or process**. Individual problems are based on the knowledge and/or skills in the MCA (i.e. NS, MS or HD). At Level 1 it is expected that the student will be able to address individual problems, some of which **draw upon a combination of any two of the MCA** and require students to make connections between those content areas. **The context** of individual problems at L1 will require some comprehension in order for the student to be able independently to identify and carry out an appropriate mathematical approach.

³A **complex problem** requires a **multi-step process, typically requiring planning and working through at least two connected steps or processes**. Individual problems are based on a combination of the knowledge and/or skills from the MCA (NS, MS or HD). At Level 2 it is expected that the student will be able to address individual problems some of which draw upon a combination of **all three MCA** and require students to make connections between those content areas. **The context** of individual problems at L2 will require interpretation and analysis in order for the student to be able independently to identify and carry out an appropriate mathematical process or processes.