

Maths and Me: Junior Infants – Short-Term Plan, Unit 4: Time 1 (October: Weeks 3&4)

Strand(s) > Strand Unit(s)

Measures > Time. Number > Numeration and Counting; Sets and Operations.




Learning Outcome(s)

Through appropriately playful and engaging learning experiences children should be able to develop a sense of time and its uses; develop an awareness that the purpose of counting is to quantify; use a range of counting strategies for a range of purposes; recognise and understand what happens when quantities (sets) are partitioned and combined.

Lesson	CM	Learning Experiences	Assessment
1		<p>Using the Language of Time: Identifies the present time, things that happened in the (recent and distant) past, and events that will happen in the (near and distant) future (U&C); Uses or responds to simple language associated with time (C)</p>	<p>Intuitive Assessment: responding to emerging misconceptions</p>
2		<p>Making a Sequence: Begins to recognise the order of daily routines at home and at school (U&C); Describes and sequences events in their daily routine (C)</p>	<p>Planned Interactions: responding to insights gleaned from children's responses to learning experiences</p>
3		<p>Sequencing Errors: Describes and represents sequences of events (C); Uses visual supports to convey and understand time sequences (A&PS); Identifies errors in chronological sequences of events (R)</p>	<p>Assessment Events: information gathered from completion of the unit assessment in the Progress Assessment Booklet page 10</p>
4		<p>Morning, Day, Night: Analyses and sorts events according to when they occur (For example: night time vs day time activities) (A&PS); Predicts events in the immediate future based on familiar patterns of events (R)</p>	
5		<p>Review and Reflect: Reviews and reflects on learning (U&C)</p>	

Key: Elements: (U&C) Understanding and Connecting; (C) Communicating; (R) Reasoning; (A&PS) Applying and Problem-Solving. **CM:** **Cuntas Míosúil:** please tick when you have completed the focus of learning. **Learning Experiences:** **C** concrete activity; **D** digital activity; **P** activity based on printed materials, followed by lesson numbers.

Additional information for planning

 Progression Continua	See 'Junior Infants <i>Maths and Me</i> Progression Continua Overview' for a detailed breakdown of how all progression continua are covered.
 Maths Language	See 'Junior Infants <i>Maths and Me</i> Maths Language Overview', individual lesson plans and Unit 4 Maths Language Cards.
 Equipment	See 'Junior Infants <i>Maths and Me</i> Maths Equipment Overview' and individual lesson plans.
Inclusive Practices	<ul style="list-style-type: none"> ● See Let's Strengthen and Let's Deepen suggestions throughout lesson plans. ● See Unit 4 Let's Strengthen Suggestions for Teachers. (These address the Common Misconceptions and Difficulties listed below.) ● See Unit 4 Let's Strengthen PCM. ● See Unit 4 Let's Deepen PCM.
Integration	See individual lesson plans.

Background and rationale

- As young children find the concept of time an abstract one, the best place to start is with the word 'now'. This gives them a reference point they will readily resonate with. When you start with 'now', you can then expand *forwards* with language such as: *later, next, then, after, last*. You can expand *backwards* with language such as: *earlier, before, first*.
- Take every opportunity this week to use the language of time. Encourage the children to use their 'new' language, and model it yourself.
- The children will gradually begin to assimilate the concept of time when they experience a sequence of events. Their attention is drawn to how their school day evolves in stages (how one 'event', such as lunch time, comes after break time). From this practical experience, they learn to recall events that came before their school day (e.g. getting up). They can visualise (or draw from memory) events that will come after their school day (e.g. going home). Based on this experience, they can begin to apply the labels 'morning', 'day' and 'night', and to divide their day into these categories.
- The children's initial experience of time is as a linear sequence, so they begin by sequencing their school day. Next, they sequence their own personal day. Finally, they put the events in a story in the correct sequence. All of these rich activities provide a solid foundation for the children to build their knowledge of time.

The theme of this unit is **The Story of Our Day**.

Common misconceptions and difficulties

- It is very challenging for young children to 'measure' time, as it is an abstract concept that cannot be felt or seen.
- Young children live in the present, so comprehending what has happened in the past and what might happen in the future are concepts that are only acquired through personal, consistent experiences.
- Many children have difficulty remembering their experiences in a sequential manner, and so might struggle to recall in the middle of the day, for example, whether they ate breakfast this morning.

The Unit 4 Let's Strengthen Suggestions for Teachers address the common misconceptions and difficulties listed above.

Mathematical models and representations

- Simple timetables

Day 1, Lesson 1

Using the Language of Time

Focus of learning (with Elements)

- Identifies the present time, things that happened in the (recent and distant) past, and events that will happen in the (near and distant) future (U&C)
- Uses or responds to simple language associated with time (C)

Learning experiences

- C** Class discussion: The Language of Time **MAM Routine: Reason & Respond**
- C** Concrete activity: Where is Teddy? **MAM Routine: Reason & Respond**
- D** Digital activity: My School Day **MAM Routine: Reason & Respond**
- P** Story: *A Beach Tail* by Karen Lynn Williams

Equipment

- Picture book: *A Beach Tail* by Karen Lynn Williams
- PCM 18

Maths language

- now, next, later, earlier, before, after, first, last, then, over, yet

Warm-up

C Class discussion: The Language of Time
MAM Routine: Reason & Respond

This is an opportunity to assess the children's understanding of some of the language that pertains to time. Ask:



- What are we doing *now*? (sitting, talking, listening, turning around)
- What are *you* doing now? (You can then ask an individual child, e.g. Emily.)
- What is Emily doing now?
- What can you see/smell/touch/feel now?
- Can we all stand up ... *now*? Let's clap 1, 2, 3 and ... *then* sit down.
- What will we do *next*? (e.g. Let's wriggle like a snake.)
- What will we do *next*? (e.g. Hop like a frog.)
- What did we do *before* we hopped like a frog?

Continue using the key words (*now, next, before, then*), while asking the children to perform actions.

The children could recite nursery rhymes that contain a sequence of simple actions, such as: 'Humpty Dumpty' (*He sat on the wall. He fell off the wall. He ended up in bits!*); 'Incy Wincy Spider'; 'Little Miss Muffet'; 'Hickory Dickory Dock'. Ask:

- What happened next?
- What happened before that?
- What happened in the end?

Teaching tip

Some children may understand some aspects of the concept of time, but not be able to verbalise them. Enable these children to use the language themselves – as opposed to being passive listeners. Use (and enable the children to use) the language of time during this week in particular. Ask:

- Is break time next or is lunch time next?
- Is break time over?

C Concrete activity: Where is Teddy?
MAM Routine: Reason & Respond

You (or a child) are going to put Teddy in different positions. Begin by putting Teddy on your desk. Ask:

- Where is Teddy *now*? (Put him in different locations and ask the same question, emphasising the word 'now'.)

Put Teddy outside the door for a few seconds, and then bring him in again. Ask:

- Where was Teddy *before* I brought him in?
- Where will I put Teddy *next*?

Teaching tip

Some children may not 'remember' whether they had lunch, for example, and so will find it difficult to sequence their activities. Gaining practice in sequencing and verbalising their various daily experiences will greatly assist them in this regard.

Main event



D Digital activity: My School Day

MAM Routine: Reason & Respond

Use the interactive tool to make a simple timetable. The children help you to put the 'stages' and/or 'subjects' in order (for example, start with roll call, then maths, then play time). Drag and drop the stages/subjects into the agreed order. Ask:

- What do we do *first*? (e.g. roll call)
- Where will we put that word and picture?
- What will we put *next/after* that?
- What will we do at the *end/last*?
- Look at our timetable. What are we going to do *now*?

Refer to the timetable during the day. Elicit full sentences from the children. Ask:

- What have we just done?
- What will we be doing *later*?
- Have I called the roll?
- What will we do *next*?
- Is play time *over*?
- Have we had our lunch *yet*?

- What did we do *earlier*?
- Is it home time *yet*?

Let's strengthen

Simplify the timetable by using fewer stages/subjects. Write the stages/subjects on the board and use in place of the interactive timetable if needs be.

P Story: A Beach Tail by Karen Lynn Williams

Read *A Beach Tail*, in which Gregory draws a lion with a very long tail in the sand at the beach. The tail passes a sequence of items on the beach – what comes next/before? The children could draw three of the items (e.g. a jellyfish a sandcastle and a crab). They could use the images on PCM 18: A Beach Tail, and sequence them to match the events in the story. (There are two crabs mentioned, but for simplicity of sequencing, just use one crab.)

Teaching tip

A reading of *A Beach Tail* is also available at: edco.ie/4yba



Optional consolidation and extension possibilities

Role play Using the language of time and props such as watches, the children role-play scenarios in which a customer/patient/pupil is late. They use language such as: *You are late! Why are you late? You should have been here at 3 o'clock! I don't have time to see you now – sorry. You should be on time/early.*

Choice Board Create a Choice Board by drawing three boxes on a piece of paper. Write 'first', 'then', 'last' on the boxes. The Choice Board gives children a range of options, which could be for play (e.g. choosing a toy), sorting activities (beads, bears, cubes), games, etc. Print images of the options (e.g. of toys) for the children to make their selection. To relate this to *time*, each child decides which toy, for example, they will play with *first*, *then* and *last*. Initially, limit it to three choices. They stick the images on the Choice Board. For more information on Choice Boards, go to: edco.ie/y5bw



Games Bank Play 'Change ... Now!' from the Games Bank.

Visual Arts The children could draw or paint three pictures to go with a nursery rhyme (e.g. 'Humpty Dumpty').

First, Then The children verbalise what they are going to do *first*, and *then* they might do something they prefer or get a small reward. For example: For lunch, they might *first* eat their sandwich, and *then* eat the snack bar/treat. Or they might *first* practise writing a numeral, and *then* play a game. This links seamlessly with the language of time.

Let's strengthen

Use Unit 4 Let's Strengthen PCM to support this idea and reinforce this language.

Day 2, Lesson 2

Making a Sequence

Focus of learning (with Elements)

- Begins to recognise the order of daily routines at home and at school (U&C)
- Describes and sequences events in their daily routine (C)

Learning experiences

- D** Video: Dara's Day **MAM Routine: Reason & Respond**
- D** Digital activity: Sequence Dara's Day
- P** Sequencing activity: Sequencing Three Images
- P** Pupil's Book page 23: Making a Sequence

Equipment

- Class clothesline and pegs
- Scissors
- PCMs 1, 19, 20

Maths language

- informal use of: morning, day, night

Warm-up

- D** Video: Dara's Day
MAM Routine: Reason & Respond

Watch the video, which shows a sequence of events in Dara's daily routine (wake up, get up, etc.). Ask:

- What does Dara do first? (Extend to: *What do you do first?*)
- What does Dara do next?

(You could also book-end the sequence with, e.g., 'wake up' and 'go to sleep', and ask the children to tell you what happens in-between.)

Let's deepen

Intersperse the following terms into the language of time: *morning, day, afternoon, evening, night*.

Discuss the scenes in the video and categorise them as belonging to morning, day or night.

- D** Digital activity: Sequence Dara's Day

Play the interactive sequencing activity in which the children put the events from the video in the correct order.

Main event

- P** Sequencing activity: Sequencing Three Images

Divide the children into groups. Use the images from PCM 19: Dara's Day and ask the children to help you order the sequence by pegging the three images on the class clothesline in the correct order. Next, distribute scissors and a copy of one of the picture sequences from PCM 20: Picture Sequences to each group. The children cut out the cards, sequence each set of images and explain *why* they are putting them in that order, using the language of time. For example:

- *First*, I have a whole apple. *Then*, I eat some of it. *Next*, I eat all of it. The only thing left *now* is the core.

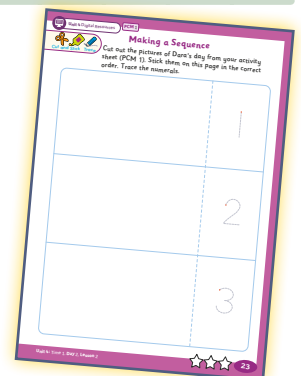
The groups could swap their sets of images, mix up the sets and reorder them.

Let's deepen

Give some children scissors and a copy of PCM 9: Numerals 1, 2 and 3 (Small). Ask them to place the three images in a sequence.

- P** Pupil's Book page 23: Making a Sequence

Distribute scissors, glue and a copy of PCM 1: Making a Sequence to each child so that they can put Dara's day in the correct order.



Optional consolidation and extension possibilities

Maths Journal The children draw a sequence of three simple images in their journal. Discuss a simple sequence such as eating an apple. Start with the whole apple, then a 'half-eaten' apple, finally just the core. You could use a real apple to demonstrate. Ask the children how many pictures they will draw (3). Which one will they draw first? Next? Last? Can they talk about their pictures? Have they left enough space on their page to draw the sequence?

A Day on the Line Ask the children to draw one of the events in Dara's day (e.g. eat breakfast). Ensure that all the events get covered. Ask the children to help you peg their drawings in the correct order on the class clothesline. (If there are a few of one stage, just peg them all together.)

Role play Ask the children to re-enact their day, starting with waking up. One child narrates the sequence. You could try this as a whole-class activity, in which the children try to guess what one child is doing (e.g. brushing their teeth).

Dara's Day (Integration with PE) Call out each stage in the sequence of Dara's day (e.g. eat lunch) and ask the children to act it out. Alternatively, arrange the children into pairs or groups of three, and assign each a stage of Dara's day (e.g. get up). Using the language of time, arrange the pairs/groups in the order of the sequence.

STEM Can the children make an object in three simple steps? E.g. make a 'basket' with one egg in it using modelling dough. They count the steps to show there are only three.

Day 3, Lesson 3

Sequencing Errors

Focus of learning (with Elements)

- Describes and represents sequences of events (C)
- Uses visual supports to convey and understand time sequences (A&PS)
- Identifies errors in chronological sequences of events (R)

Learning experiences

- D** Animation: The Little Red Hen (1) **MAM Routine: Reason & Respond**
- D** Digital activity: The Little Red Hen (2) **MAM Routine: Reason & Respond**
- P** Pupil's Book page 24: Sequencing Errors

Equipment

- There is no equipment required for this lesson.

Maths language

- There is no new maths language for this lesson.

Warm-up

- D** **Animation: The Little Red Hen (1)**
MAM Routine: Reason & Respond

Teaching tip

You could read this story several times (e.g. at story time) so that the children are familiar with it.

This is a good opportunity to assess the children's understanding of the concept of time (sequencing

and language). Play the animation. Stop the story at different points and say/ask:

- I wonder what will happen next.
- What just happened?
- What is happening now?

Ask the children about the animals in the story and the sequence of events. Can they retell the sequence of the story (with your help)?



Main event

D Digital activity: The Little Red Hen (2)**MAM Routine: Reason & Respond**

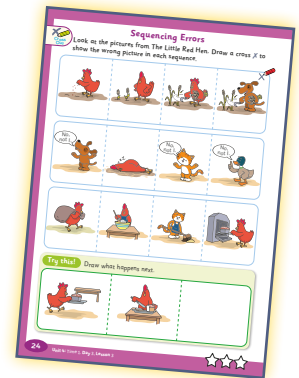
Play the interactive sequencing activity, in which the events of the story are in the wrong position. Discuss the sequence with the children. Can they identify what is incorrect and verbalise the error? Can they recall and describe the sequence without the images? Can they draw each image (with visual support if needed)? Drag and drop each picture to change its position in the sequence.

Let's deepen

Use any one of the three-image sequences from the above digital activity. Mix the images up or hide one image by colouring over it using the pen tool. Can the children tell you the correct order or identify which image is missing?

Let's deepen

Some children could add printed numerals from PCM 9: Numerals 1, 2 and 3 (Small) to their drawings or try writing the numerals.

P Pupil's Book page 24: Sequencing Errors

Optional consolidation and extension possibilities

Role play The children should re-enact the story of 'The Little Red Hen' in the correct sequence. Various props could be provided (e.g. seeds, mixing bowl, wooden spoon).

Story Read 'Chicken Licken', another story with a strong sequence of action and repetition. A reading of the story is available at: edco.ie/xj64

Day 4, Lesson 4

Morning, Day, Night

Focus of learning (with Elements)

- Analyses and sorts events according to when they occur (For example: night time vs day time activities) (A&PS)
- Predicts events in the immediate future based on familiar patterns of events (R)

Learning experiences

- D** Animation: Monty's Day **MAM Routine: Notice & Wonder**
- D** Digital activity: Sequence Monty's Day **MAM Routine: Reason & Respond**
- C** Concrete activity: When do I ... ? **MAM Routine: Reason & Respond**
- C** Concrete activity: Class Clothesline
- P** Pupil's Book page 25: Morning, Day, Night

Equipment

- Props, including: toothbrush, toothpaste, pyjamas, picture book, hairbrush, box of breakfast cereal, lunchbox, pillow, soap, shampoo and storybook
- Class clothesline and pegs
- Unit 4 Maths Language Cards
- Monty the puppet

Maths language

- morning, day, night

Warm-up



D Animation: Monty's Day

MAM Routine: Notice & Wonder

Use Monty the puppet alongside the animation, which features a sequence of events in Monty's day. Ask:

- What do you notice?
- What do you wonder?

Teaching tip

Link the nine events in Monty's day to the Number strand by asking the children to help you count from 1 to 9.

D Digital activity: Sequence Monty's Day

MAM Routine: Reason & Respond

Play the interactive sequencing activity which uses scenes from the Monty's Day animation. The events are jumbled and the children need to put them in the correct order. As they order each set of scenes, ask:

- What does Monty do first?
- What does Monty do next?
- What comes before/after/later?
- Where will I put this picture?

Categorise the images as belonging to morning, day or night.

Main event

C Concrete activity: When do I ... ?

MAM Routine: Reason & Respond

Use the maths language cards (morning, day, night). You will also need the props listed in the Equipment section. Hold up each of the props in turn (e.g. the toothbrush) and ask:

- When do I use this? (It could be morning *and* night.)

There will be plenty of rich discussion as to which category each prop belongs to, or whether there is more than one category for some children. Show the children the three cards, drawing their attention to the images. (The children can practise sight-reading the words.) Hold up each card in turn, as you ask:

- What do you do in the morning? (Get up, wash, get dressed, eat breakfast, etc.)
- What do you do during the day? (Eat lunch, play in the yard, do PE, go home, etc.)
- What do you do at night? (Eat dinner, watch TV, do homework, play games, read a bedtime story, put on pyjamas, etc.)

Choose a daily activity (e.g. get up) and ask:

- When do I do this: morning, day or night?

Can the children tell you the correct time of day for each daily activity? Use the cards as visual prompts to reinforce the time of day. Revise and assess the language the children have learned and incorporate



the three 'new' words: *morning, day, night*. Ask:

- What are you doing now?
- What will you do later today?
- What did you do this morning?
- What will you do at night?

C Concrete activity: Class Clothesline

Peg the cards for *morning* and *night* on the class clothesline. Ask:

- What comes in-between? (day)
- What do we do during the day?

The children draw pictures of their daytime activities and peg them in-between 'morning' and 'night' on the clothesline.

P Pupil's Book page 25: Morning, Day, Night



Optional consolidation and extension possibilities

Role play The children could use the props from the lesson in the play area to re-enact the three main times of the day, by acting out brushing their teeth, eating their lunch, brushing their hair, reading a bedtime story, etc. They could assign roles such as Dad, Mam, sibling, Granny, etc.

Story *Night Monkey, Day Monkey* by Julia Donaldson, in which two monkeys share night-time and daytime activities, or listen to a reading at: edco.ie/sw3t

Morning, Day, Night, Go! (Integration with PE) This activity should be carried out in the PE hall. Make a 'morning area', a 'day area' and a 'night area'. Place a prop or flashcard in each area. When you call out an action (e.g. 'Putting on my pyjamas!'), the children run to the correct area (i.e. the 'night area'). The last one there is out! There are many different actions you could call out: 'Eating my lunch!', 'Playing football!', 'Listening to a bedtime story!', 'Waking up!', and so on.

Home/School Links Book Page 12 can be completed any time after this lesson.

Day 5, Lesson 5

Review and Reflect

Focus of learning (with Elements)

- Reviews and reflects on learning (U&C)

Warm-up

Carry out a warm-up activity of your choice from one of the lessons in this unit.

Main event

Choose from this menu of activity ideas, or choose your own way to best structure this last lesson to suit your needs and the needs of your class.

Let's talk!

Use one of the interactive posters to recap on the language the children have been learning.

Maths language

- Revise some of the three-image sequences and ensure that the children use the language of time.
- Use the maths language cards for this unit to revise the key terms. For example: If the image and text are cut apart, can the children match them?
- Read one of the suggested sequence stories or try another such as *Farmer Duck* by Martin Waddell, or *Dear Zoo* by Rod Campbell.

Teaching tip

Recordings of these stories are also available: *Farmer Duck* at edco.ie/98j7 and *Dear Zoo* at edco.ie/ge9y

Home/School Links Book

Page 13 can be completed any time after this lesson.

Let's create!

Revisit a role-play activity or do a role play you did not have time to try.

Progress Assessment Booklet	Maths eyes
<p>Complete Questions 13–14 on page 10. Alternatively, these can be left to do as part of a bigger review during the next review week.</p>	<p>Ask the children to look around them and see where they can ‘see time’. You might have a class clock, watch, egg timer, stopwatch, timer on a mobile phone, or they might observe shadows cast by the sun.</p>
Let’s strengthen	Let’s deepen
<p>Identify children who might benefit from extra practice with some of the key concepts or skills in this unit. Consult the Unit 4 Let’s Strengthen Suggestions for Teachers.</p>	<ul style="list-style-type: none"> ● The children could draw their own three-image sequence with numbers 1, 2, 3 added. ● In groups of three, the children could draw a morning picture, a day picture and a night picture, and then sequence their pictures and number them. ● Use the Unit 4 Let’s Deepen PCM.

