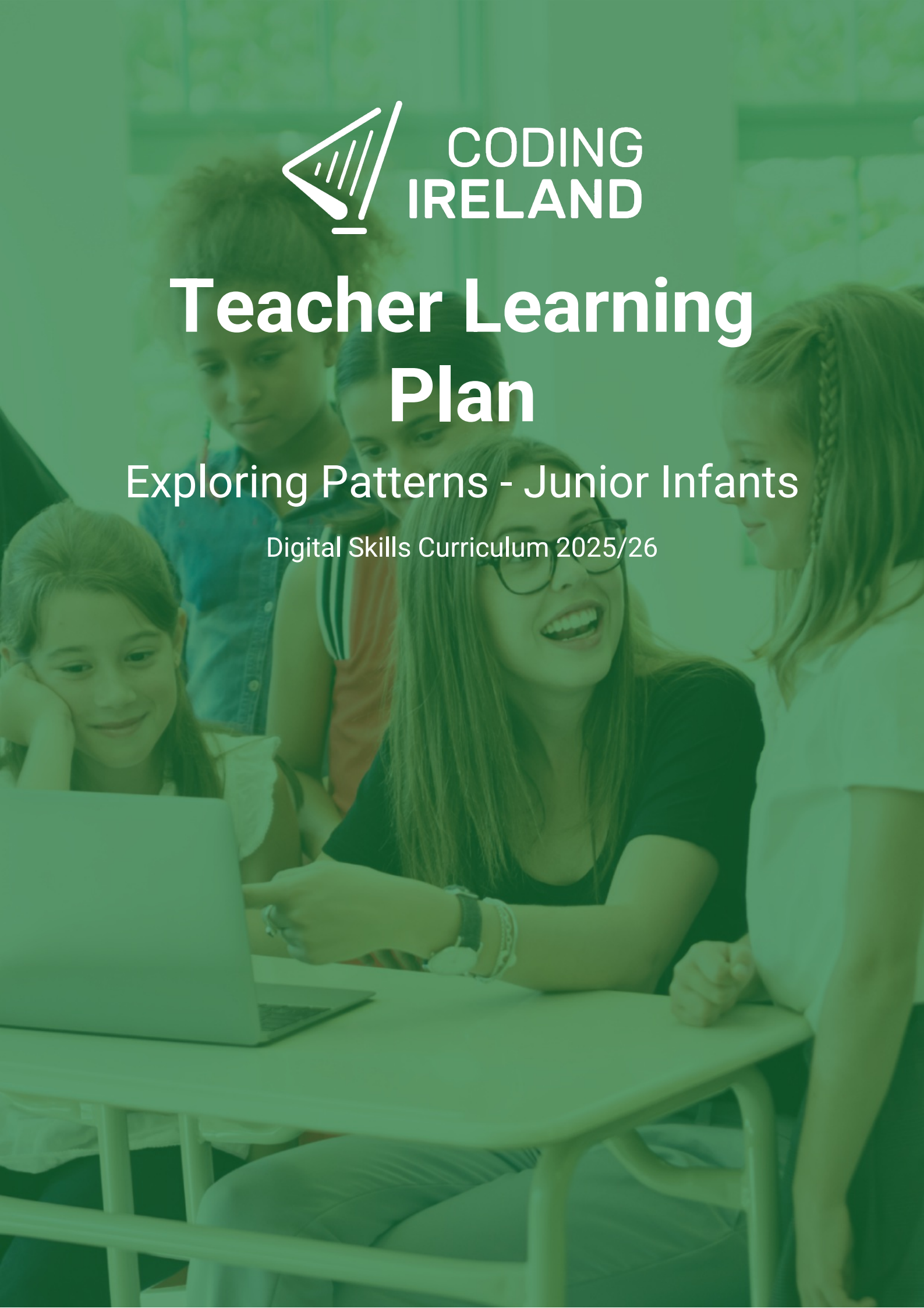

CODING IRELAND

Teacher Learning Plan

Exploring Patterns - Junior Infants

Digital Skills Curriculum 2025/26

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How to Use This Learning Plan

This learning plan provides an overview of the Exploring Patterns for Junior Infants, including it's structure, learning goals and outcomes, as well as guidance on how to effectively deliver the lessons.

Course Structure

The course is broken down into modules, units and lessons. Each unit focuses on a specific topic and contains several lessons that build on each other to develop students' skills progressively.

Student Access

Junior Infants students do not log into the platform. All lessons are teacher-led, with the teacher delivering the content and guiding students through activities.

Conducting a Lesson

Here's the recommended approach for starting a lesson:

1. Log in to your teacher account and open your class.
2. Locate and open the lesson you'll be covering.

All lessons are divided into clear, manageable steps, which you will lead the students through, often using your screen to display or demonstrate parts of the lesson.

Challenges

Most lessons include an optional challenge at the end. If time permits, these activities encourage students to extend their work from the lesson, enabling differentiation in learning.

Quizzes

Most lessons include an optional multiple-choice quiz at the end to reinforce key concepts. Students can select from three difficulty levels:

1. Easy: Focuses on basic concepts, simple recall, and foundational understanding.
2. Normal: Involves moderate complexity, requiring straightforward application of concepts.
3. Hard: Presents challenging questions that demand deeper analysis, application to edge cases, or complex scenarios.

Student Devices and Equipment

Students only need a tablet (such as an iPad). Some optional modules in the Digital Skills Curriculum may require additional equipment such as Bee Bots or Snap Circuits, which are specified in the module details.

Student devices can be shared amongst students (with them working in a group of 2 or 3) if necessary.

Need Help?

We're always happy to answer your questions and give advice. You can contact our team at info@codingireland.ie or 01 584 9955.

Exploring Patterns

This module guides teachers through a series of lessons designed to introduce students to the concept of sequencing and logical order, essential for understanding coding instructions. The module includes interactive games, discussions, and worksheet activities, progressing from simple 'first/then' statements to more complex grid navigation tasks. Teachers are advised to explain concepts clearly, make learning fun and relatable, and encourage students to visualise movements and explain their thought processes.

Duration	**Equipment**
Classroom hours ~4 hours	Required Equipment: • Interactive Display • IWB/Projector/Large Screen • Pen & Paper • Printer
Learning Goals	**Learning Outcomes**
1. Understand and apply the concept of sequencing everyday activities using 'first/then' statements. 2. Recognise and predict outcomes based on given conditions using 'if/then' statements. 3. Arrange steps of daily activities in the correct logical order to reinforce the concept of sequencing. 4. Learn and apply the concept of grid navigation through interactive games and activities. 5. Expand understanding of grid navigation from a 3x3 to a 4x4 grid, including moving a character to different targets.	1. Understand and apply the concept of sequencing everyday activities using 'first/then' statements. 2. Sequence actions using "if/then" statements to understand cause and effect relationships. 3. Arrange steps of daily activities in the correct order to understand the logical flow of events. 4. Learn and apply the concept of grid navigation through forward and backward movement. 5. Navigate a character on a larger 4x4 grid, expanding from the previous understanding of a 3x3 grid.

Module: Lessons

This module offers a comprehensive exploration of sequencing and logical thinking skills through engaging, interactive lessons. Designed for young learners, it introduces concepts such as 'first/then' and 'if/then' statements, grid navigation, and the importance of order in instructions, laying a strong foundation for understanding coding principles.

Unit	Lesson	Difficulty	Duration	Quiz	Challenge
Lessons	Bossy Words	Beginner	30		
Lessons	First Things First: What Comes Next? Version 2	Beginner	30		
Lessons	If This, Then That: Conditional Fun!	Beginner	30		
Lessons	Order Up! Sequencing Made Simple	Beginner	30		
Lessons	Number Line Adventure: Step by Step	Beginner	30		
Lessons	Grid Explorer: Navigating the 3x3	Beginner	30		
Lessons	Big Grid Challenge: Conquering the 4x4	Beginner	30		

Unit: Lessons

Bossy Words

This lesson guides teachers through activities to help students understand the concept of sequencing everyday activities using 'first/then' statements. Activities include discussing 'Bossy Words', playing 'Simon Says', discussing instructions, and completing a 'First/Then' worksheet. This lesson lays the foundation for understanding the logical order of coding instructions.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To captivate young learners, start by creating a lively circle time atmosphere, sparking curiosity with relatable questions about instructions they've heard at home or school. Prepare by printing worksheets and setting up the slideshow and sorting game, ensuring all materials are accessible for 4-5-year-olds. Facilitate interactive discussions and the 'Simon Says' game to reinforce the concept of commands, keeping energy high with clear, enthusiastic delivery. Watch for students struggling with listening or categorising words, offering gentle prompts as needed. Emphasise real-life connections to instructions, making the learning meaningful and fun for all.

Required equipment for this lesson:

- Printer
- Pen & Paper
- Interactive Display

Learning Goals	Learning Outcomes
• Students will understand the concept of sequencing and the importance of following instructions in order. • Students will be able to identify 'Bossy Words' and understand their role as instructions or commands. • Students will develop their listening skills and ability to follow instructions through the game 'Simon Says'. • Students will apply their understanding of the 'first/then' concept in a practical worksheet activity. • Students will enhance their creativity by creating their own 'first/then' sequences. • Students will develop an understanding of the foundational concepts of coding through the concept of sequencing.	• Students will be able to define and give examples of 'Bossy Words'. • Students will be able to discuss the importance of instructions and provide examples from their daily life. • Students will be able to participate in the game 'Simon Says', demonstrating their understanding of following instructions in sequence. • Students will be able to complete the 'First/Then Cut and Stick Activity' sheet, demonstrating their ability to sequence events. • Students will be able to create their own 'first/then' sequences, demonstrating their understanding of the concept. • Students will be able to discuss their 'first/then' sequences, explaining their reasoning behind the sequence order.

First Things First: What Comes Next? Version 2

This lesson guides teachers through activities to help students understand the concept of sequencing everyday activities using 'first/then' statements. Activities include discussing 'Bossy Words', playing 'Simon Says', discussing instructions, and completing a 'First/Then' worksheet. This lesson lays the foundation for understanding the logical order of coding instructions.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark student curiosity, begin by connecting the idea of sequencing to everyday routines, making it relatable and engaging. Prepare by printing worksheets and familiarising yourself with the ‘Simon Says’ game rules and the interactive story. During facilitation, encourage active participation in discussions about ‘bossy words’ and ‘first/then’ concepts, ensuring all students contribute ideas. Watch for challenges like confusion over game instructions; clarify rules with examples. For effective delivery, maintain high energy during activities and offer differentiation by pairing struggling students with peers for worksheet tasks, fostering collaboration and understanding.

Required equipment for this lesson:

- IWB/Projector/Large Screen

Learning Goals	Learning Outcomes
1. Understand the concept of sequencing using 'first/then' statements. 2. Recognise the importance of logical order in everyday activities. 3. Apply sequencing skills through interactive games and worksheets. 4. Develop the ability to follow and give clear instructions. 5. Build foundational skills for logical thinking and coding concepts.	1. Identify and use 'first/then' statements to describe the sequence of everyday activities. 2. Apply the concept of sequencing by matching 'first' actions with corresponding 'then' actions in a worksheet activity. 3. Create an original 'first/then' sequence by drawing or illustrating a pair of related actions. 4. Recognise and follow instructions using 'bossy words' during a game of Simon Says. 5. Demonstrate understanding of logical order by correctly predicting 'what comes next' in a sequencing game.

If This, Then That: Conditional Fun!

In this lesson, the students will learn to sequence actions using "if/then" statements, helping them understand cause and effect relationships and laying the groundwork for logical thinking in coding.

This exercise fosters their ability to recognise and predict outcomes based on given conditions, which is essential for programming.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark curiosity, begin by connecting conditional logic to real-life decisions, preparing students with a quick recap of sequencing concepts before diving into interactive games like a tailored version of Simon Says. Facilitate engagement by encouraging active participation in whiteboard activities and discussions during slideshow predictions, ensuring all voices are heard. Focus on the core idea of 'if/then' statements as building blocks of logic, while anticipating challenges like varying comprehension levels—offer simpler prompts for struggling learners. For effective delivery, maintain high energy, use clear examples, and allow time for creative worksheet responses to solidify understanding.

Required equipment for this lesson:

- Printer
- Pen & Paper
- Interactive Display

Learning Goals	Learning Outcomes
• Students will understand the concept of 'if' and 'then' and differentiate it from 'first and then'. • Students will be able to use 'if' and 'then' in sentences to express conditions and consequences. • Students will develop their listening skills by following 'if' commands in a game. • Students will enhance their critical thinking skills by predicting outcomes in 'if' scenarios. • Students will improve their drawing skills by illustrating 'then' scenarios on a worksheet. • Students will develop their discussion skills by sharing their thoughts and ideas about 'if' and 'then' scenarios.	• Students will be able to recall and explain the meaning of bossy words from previous lessons. • Students will understand the difference between 'first and then' and 'if and then' and be able to provide examples. • Students will be able to follow 'if' commands in a game setting, demonstrating their understanding of the concept. • Students will be able to interpret 'if and then' scenarios in an interactive activity and make appropriate choices based on the given situation. • Students will be able to apply their understanding of 'if and then' to complete a worksheet, demonstrating their ability to think critically about potential outcomes. • Students will be able to articulate their thought process and reasoning for their choices on the worksheet, demonstrating their comprehension of the 'if and then' concept.

Order Up! Sequencing Made Simple

In this lesson, the students will practice sequencing daily activities, such as washing their hands, by arranging steps in the correct order.

This exercise progresses from previous lessons and helps students understand the logical flow of events, reinforcing the concept of sequencing, which is essential for coding and following instructions accurately.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark student engagement, kick off with a lively movement game that builds focus and teamwork, ensuring everyone participates by mirroring actions. Prepare by familiarising yourself with the interactive digital games, testing them in fullscreen for optimal visuals, and have printed worksheets ready for the hands-on task. Facilitate discussions on sequencing by encouraging students to explain their reasoning during activities, reinforcing the concept of order. Watch for challenges like varying tech skills or pacing—offer extra support or pair students as needed. Wrap up with creative tasks for early finishers to deepen understanding through personal application.

Required equipment for this lesson:

- Printer
- Pen & Paper
- Interactive Display

Learning Goals	Learning Outcomes
• Students will understand the concept of sequencing and its importance in daily life. • Students will be able to follow instructions in a sequence during the 'Follow the Leader' activity. • Students will be able to identify and correct sequences using visual aids in the 'Sequencing Activity'. • Students will demonstrate their understanding of sequencing by correctly ordering events on a worksheet. • Students will develop their reasoning skills by explaining their choices during sequencing activities. • Students will enhance their creativity by creating their own sequence of events for early finishers.	• Students will be able to demonstrate understanding of sequencing by participating in the 'Follow the Leader' activity, accurately following the leader's instructions in the correct order. • Students will be able to define sequencing and explain its importance in daily tasks during the group discussion. • Students will be able to correctly sequence the images of hand washing during the interactive activity, providing reasoning for their choices. • Students will be able to apply their understanding of sequencing to different daily tasks, correctly arranging 3-4 sets of mixed-up images in the correct order. • Students will be able to demonstrate their understanding of sequencing independently by correctly arranging the events on their sequencing worksheet. • For those who finish early, students will be able to create their own sequence of events, demonstrating creativity and a deeper understanding of the concept.

Number Line Adventure: Step by Step

This lesson introduces students to the concept of grid navigation. They'll learn about forward and backward movement through interactive games and activities. The lesson includes a 'Robot Roger' game, direction games, and a number grid movement worksheet.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark enthusiasm, begin by setting up an interactive environment with clear instructions for games that teach spatial awareness and direction-giving. Prepare by ensuring access to a projector or large screen for digital activities and printing worksheets for the final task. Facilitate engagement by rotating roles in games, encouraging precision in instructions, and praising creativity. Focus on key concepts like sequencing and logical thinking, while anticipating challenges such as vague directions—gently guide students to be specific. For effective delivery, start with simple tasks, gradually increasing complexity, and circulate during pair work to support clear communication.

Required equipment for this lesson:

- Printer
- Pen & Paper
- Interactive Display

Learning Goals	Learning Outcomes
• Students will understand the concept of grid navigation and be able to navigate a character on a grid using forward and backward movements. • Students will develop the ability to give clear and precise instructions for movement on a grid. • Students will learn to follow instructions for movement on a grid accurately. • Students will be able to apply the concept of grid navigation to different contexts, such as colors and numbers. • Students will develop problem-solving skills by figuring out the correct sequence of movements to reach a target on a grid. • Students will enhance their cooperative learning skills by working in pairs to give and follow instructions for grid navigation.	• By the end of the lesson, students will be able to follow and give simple instructions for movement on a grid. • Students will be able to demonstrate understanding of forward and backward movement on a grid. • Students will be able to use directional language to guide a character to a specific location on a grid. • Students will be able to apply their knowledge of grid navigation to a worksheet activity, demonstrating their ability to move a character forward and backward on a number grid. • Students will be able to work collaboratively in pairs, giving and following instructions for grid navigation. • Students will be able to explain their reasoning for their final position on the grid, reinforcing their understanding of the concept.

Grid Explorer: Navigating the 3x3

In this lesson, you'll guide your students through a series of activities designed to enhance their understanding of grid navigation. Starting with a game of 'Simon Says', you'll then introduce a 3x3 grid game, followed by interactive grid games themed around numbers, fruits, and colours. The students will then complete a worksheet activity, and finally, check their answers using an interactive grid.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark enthusiasm, begin with a lively round of Simon Says to sharpen students' listening skills, gradually increasing command complexity for engagement. Prepare the interactive whiteboard with the 3x3 grid, ensuring all themed versions (numbers, fruits, colours) are accessible, and demonstrate arrow movements clearly to build spatial understanding. Encourage student participation by letting them suggest commands and take turns navigating the grid. Watch for confusion with directional concepts and offer extra guidance as needed. Wrap up with the worksheet activity, using the frog-and-fruit example to clarify tasks, fostering independent problem-solving while circulating to support struggling learners.

Required equipment for this lesson:

- Printer
- Pen & Paper
- Interactive Display

Learning Goals	Learning Outcomes
• Students will understand the concept of a 3x3 grid and how to navigate it using up, down, left, and right directions. • Students will develop the ability to follow a sequence of commands to move a character on a grid. • Students will apply their understanding of grid navigation to complete a worksheet activity, predicting the end location of a character based on a sequence of commands. • Students will enhance their problem-solving skills by determining the correct sequence of commands to reach a specific location on the grid. • Students will demonstrate their understanding of grid navigation by participating in interactive grid games. • Students will develop a positive attitude towards learning through engaging and interactive activities.	• Students will be able to understand and follow instructions given in the 'Simon Says' game. • Students will be able to identify and explain the function of the up and down arrows in the context of a 3x3 grid. • Students will be able to successfully navigate a character to different items on the grid using a sequence of commands. • Students will be able to complete a worksheet independently, following directions to navigate a frog to various fruits on a 3x3 grid. • Students will be able to interact with an online grid game, demonstrating their understanding of grid navigation and direction commands. • Students will be able to demonstrate their understanding of the lesson by correctly following the directions from their worksheets on an interactive version of the grid.

Big Grid Challenge: Conquering the 4x4

This step-by-step lesson guides students through navigating a character on a grid. The lesson begins with a review of a 3x3 grid, then introduces a larger 4x4 grid. Students will practice moving a character to different colors, letters, and animals on the grid, and complete a worksheet activity to reinforce their understanding.

Beginner	30 mins	Student Quiz	Student Challenge

Teacher Notes: To spark student enthusiasm, begin by linking grid navigation to real-world problem-solving, like planning routes or programming robots. Prepare by ensuring the interactive whiteboard is set up and worksheets are printed for the 4x4 grid activities. Facilitate engagement through the lively 'Robot Statues' game, encouraging creativity in commands while monitoring for inclusivity. Focus on key concepts like spatial awareness and directional commands, transitioning smoothly from 3x3 to 4x4 grids. Watch for challenges in understanding the larger grid; offer extra guidance to struggling students. Deliver with energy, using varied themes to maintain interest and self-paced exploration.

Required equipment for this lesson:

- Printer
- Interactive Display

Learning Goals	Learning Outcomes
1. Develop critical thinking and problem-solving skills through grid navigation activities. 2. Enhance understanding of directions and spatial awareness by moving a character on a grid. 3. Improve command recognition and response through the 'Robot Statues' game. 4. Apply knowledge of 3x3 grids to navigate a more complex 4x4 grid. 5. Collaboratively solve problems and confirm understanding through interactive whiteboard activities.	1. Navigate a character on a 4x4 grid using directional commands. 2. Identify and respond to simple and complex commands in the 'Robot Statues' game. 3. Recall and apply knowledge of 3x3 grid navigation to a larger 4x4 grid. 4. Complete a worksheet activity, demonstrating understanding of grid navigation and directional commands. 5. Participate in a group review session, demonstrating ability to correct and improve grid navigation commands.

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