

# Cosmo: Movement and Play in Education and Therapy

Cosmo is an accessible, multisensory, and movement-based system designed to help Early Years and Primary learners—as well as those with Additional Learning Needs—build foundational skills. By replacing passive screen time with physical interaction, Cosmo uses touch, light, and sound to turn learning into an immersive, whole-body experience.

## The Core System

Cosmo consists of wireless, touch-sensitive controllers called **Cosmo Dots**, paired with an iPad app featuring **39 interactive activities**. These games support cognitive, motor, communication, social, emotional, and creative development. Additionally, Cosmo Dots can be used independently as **accessibility switches** to control third-party devices and software.

## Why Teachers Value Cosmo

- **Purposeful Play:** Games are rooted in movement, exploration, and cooperation.
- **Highly Adaptable:** Difficulty levels can be adjusted to suit any age or developmental stage.
- **Versatile Hardware:** Dots are lightweight, wireless, and durable. They can be placed on the floor, used on a table, or attached to walls using Velcro.



# The Five Pillars of the Cosmo Method

1. **Learning Through Play:** Every activity is a playful challenge that motivates learners to engage and persevere, leading to deeper learning and better outcomes.
2. **Learning Through Movement:** The system encourages physical activity, developing coordination and body awareness while providing opportunities for face-to-face peer interaction.
3. **Multisensory Engagement:** By engaging sight, touch, and sound simultaneously, Cosmo makes learning more inclusive and effective for different learning styles.
4. **Personalisation:** Settings—including colours, touch sensitivity, and complexity—can be modified to meet the specific needs of individual education and therapy plans.
5. **Universal Design:** Underpinned by the Universal Design for Learning (UDL), Cosmo ensures accessibility for every learner, regardless of physical or cognitive ability.

## Educational Applications

**Cognitive Development:** Building concentration, memory, basic cause-and-effect thinking, and recognition of colours, shapes, and sequences.

**Speech, Language & Communication:** Vocabulary building, sentence formation, articulation practice, storytelling.

**Gross Motor Skills:** Running, jumping, balance, responding to signals, reaction time.

**Personal, Social and Emotional Development:** Taking turns, cooperation, communication, emotional regulation.

**Artistic Development:** Playing instruments, composing melodies, recording sounds.

## Therapeutic Applications

Cosmo works very well in speech and occupational therapy, sensory integration activities, and emotional and attention training.

**Speech Therapy:** Using *My Voice* or *Sampler* for breath control and articulation.

**Sensory Integration:** Using *Fireworks* or *Rainy Day* to support sensory regulation.

**Physiotherapy:** Using *Exercises* or *Showdown* for gross motor skills and bilateral coordination.

**Occupational Therapy:** Using *Copy Me* or *Colour Matching* for precision and hand-eye coordination.

**Emotional and attention training:** Movement-, music-, and cause-and-effect-based games – cooperation, calming, and emotional self-regulation.

# Activity Guides

## Nursery

*Focused on sensory-motor cause and effect exploration.*

### “Sounds of the World”

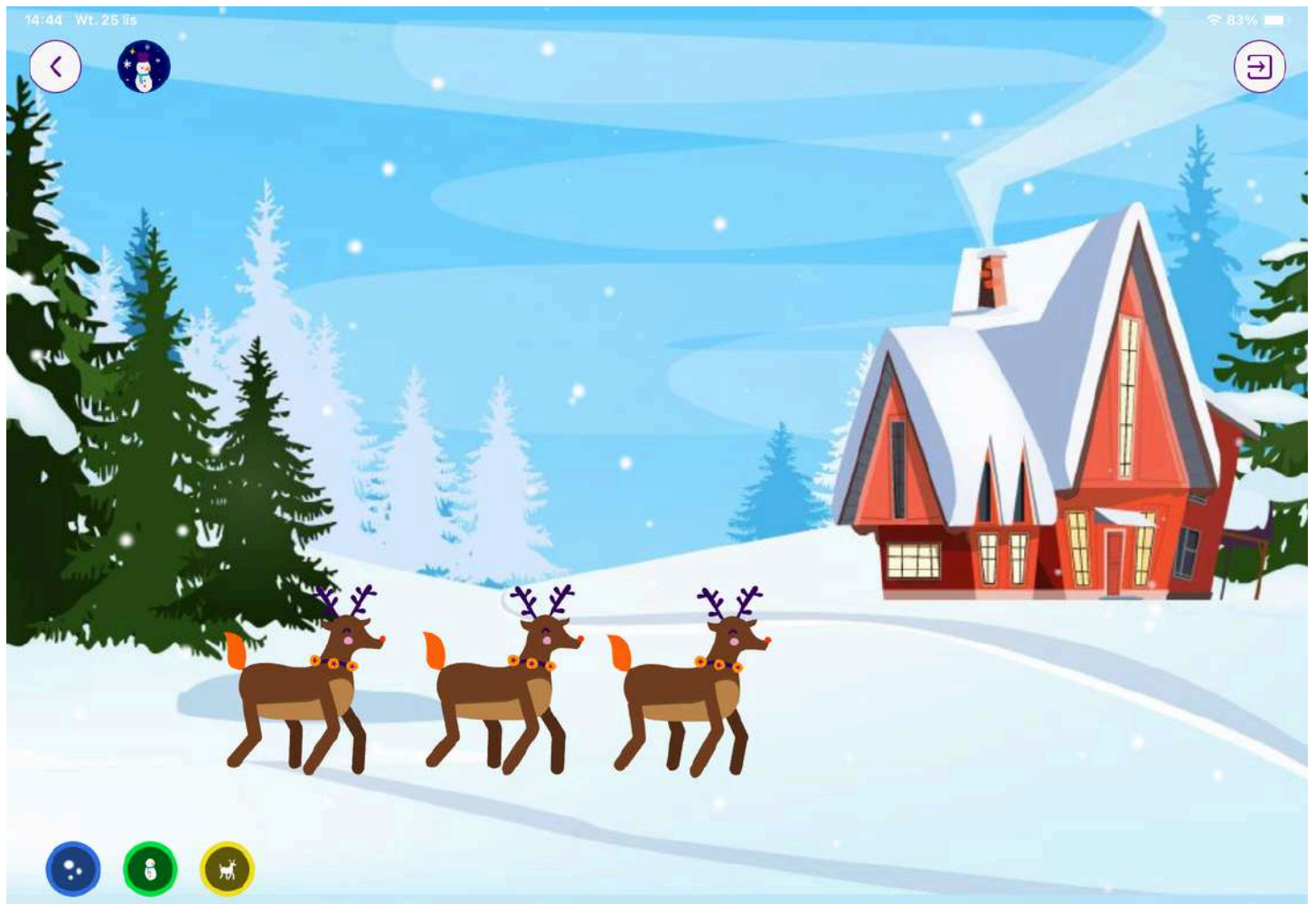
Goal: Sensory integration, vocabulary development, and vocalisation.

Setup:

- Cosmo Activity: Summer Beach, Rainy Day or Winter Wonderland.
- 6 Dots
- Connect the iPad to a larger screen if possible (HDMI/Mirroring).
- Dim the lights or lower the blinds to make the colors "pop."

Steps:

1. Press Play.
2. Encourage children to touch the Dots to hear different sounds (rain, waves, dolphins, birds).
3. Ask guiding questions: “What was that? Did you hear the rain or the bird?”
4. Encourage children to imitate the sounds or move like the animals they hear.



## “Underwater Adventure”

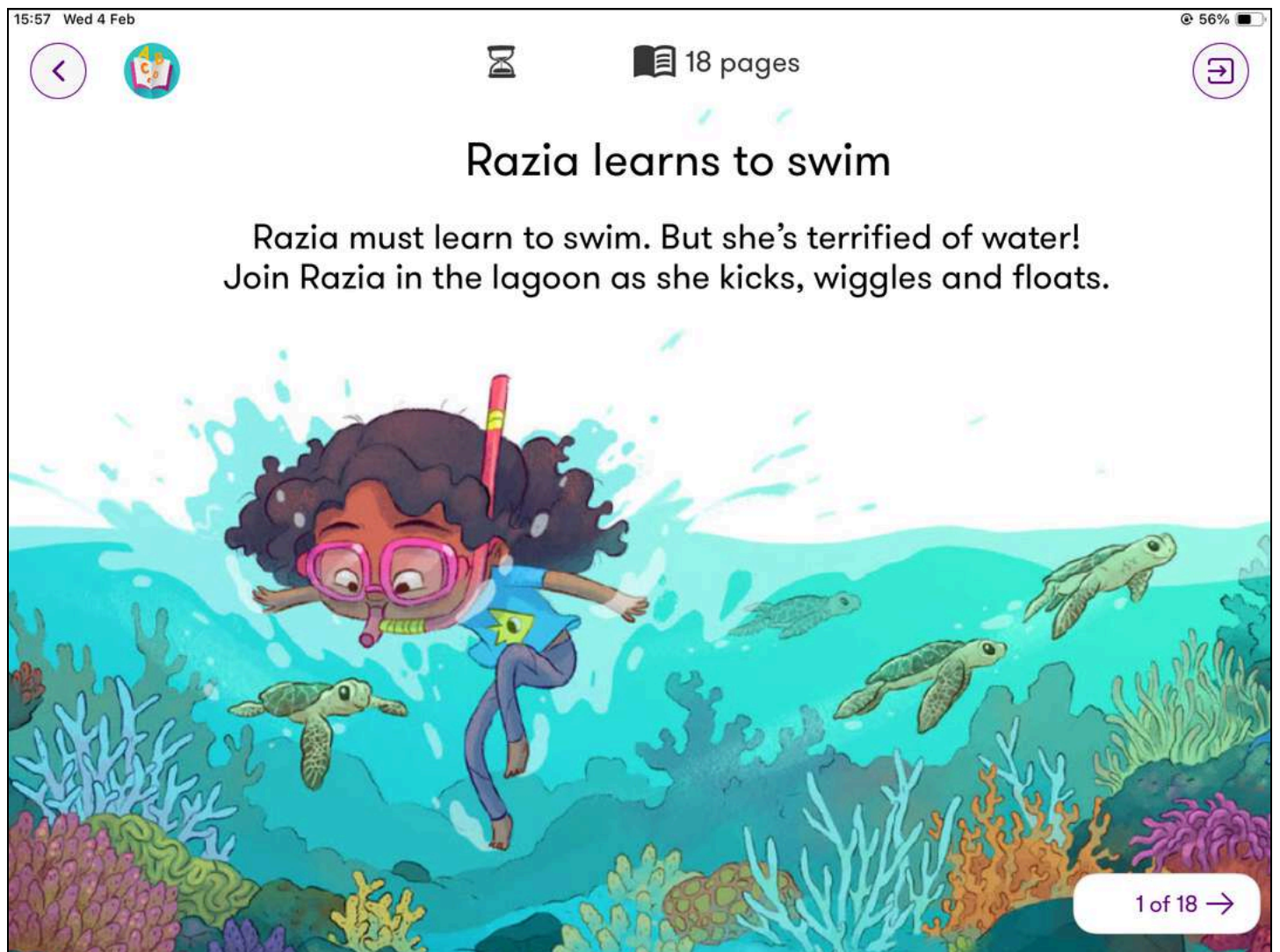
Goal: Comprehension, engagement, and expressive communication.

Setup:

- Cosmo Activity: Storytelling > Razia Learns to Swim.
- 6 Dots.
- Prepare tactile props (e.g., a spray bottle for water, bubbles, or blue ribbons).

Steps:

1. Seat learners in a circle and give one Dot to each child.
2. Narrate the story slowly.
3. When a child’s Dot lights up, encourage them to press it to trigger the story’s sound effects.
4. Use the physical props (like the spray bottle) at key moments to reinforce the sensory experience.



## “Find the Light”

Goal: Early group work, hand–eye coordination, concentration.

Setup:

- Cosmo Game: Exercise
- 6 Dots
- Activity Duration: 2 minutes
- Sound: ON
- Music Track: “No music”
- Place 6 Dots around the room or attach them to the walls using velcro pads.

Steps:

1. A Dot lights up in one spot – the child who is closest runs, touches it, and earns a point.
  2. Children work together to collect as many points as possible within a set time.
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## Reception

*Focused on emerging emotional regulation, communication and social interaction skills*

### “The Conductor and the Orchestra”

Goal: Cooperation, following rules, and creative expression.

Setup:

- Cosmo Activity: My Orchestra
- 6 Dots
- Track: Funksters Survival
- Connect to a Bluetooth speaker for better sound quality.

Steps:

- Distribute Dots to learners sitting in a circle or at desks.
- Exploration: Have children press their Dot one by one to hear their instrument. Name the instrument and mimic how to play it.
- The Performance: Acting as the "Conductor," the teacher points to individual learners to cue them to start their part.
- Mix and match instruments until the full "orchestra" is playing.
- The Stop: Signal students to stop their part one by one in reverse order to practice waiting and listening.
- Students can take turns to become the conductor.



## “A Walk of Dwarfs, Giants, and Elves”

Goal: Body awareness, movement control.

Setup:

- Cosmo Game: My Orchestra
- 6 Dots
- 6 flashcards matching colours to animals:
  - Blue - fish
  - Green - bird
  - Yellow - kangaroo
  - Orange - tiger
  - Red - crab
  - Purple - snake
- Place the Dots around the classroom so that all students can see them.
- Music track “Funksters Survival”

Steps:

1. Press any icon on the screen to light up one Cosmo Dot.
2. Students look around and see a yellow Dot. This means they now have to hop like a kangaroo.
3. Press the icon again to pause.
4. Repeat with all the colours.
5. Students can take turns pressing the icons on the screen.
6. Extra: Students can also think of different animals or commands to the colours (e.g. hop, spin, dance).

7. Extra: Play a simple memory game: "Where was the tiger?"

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## "My Turn!"

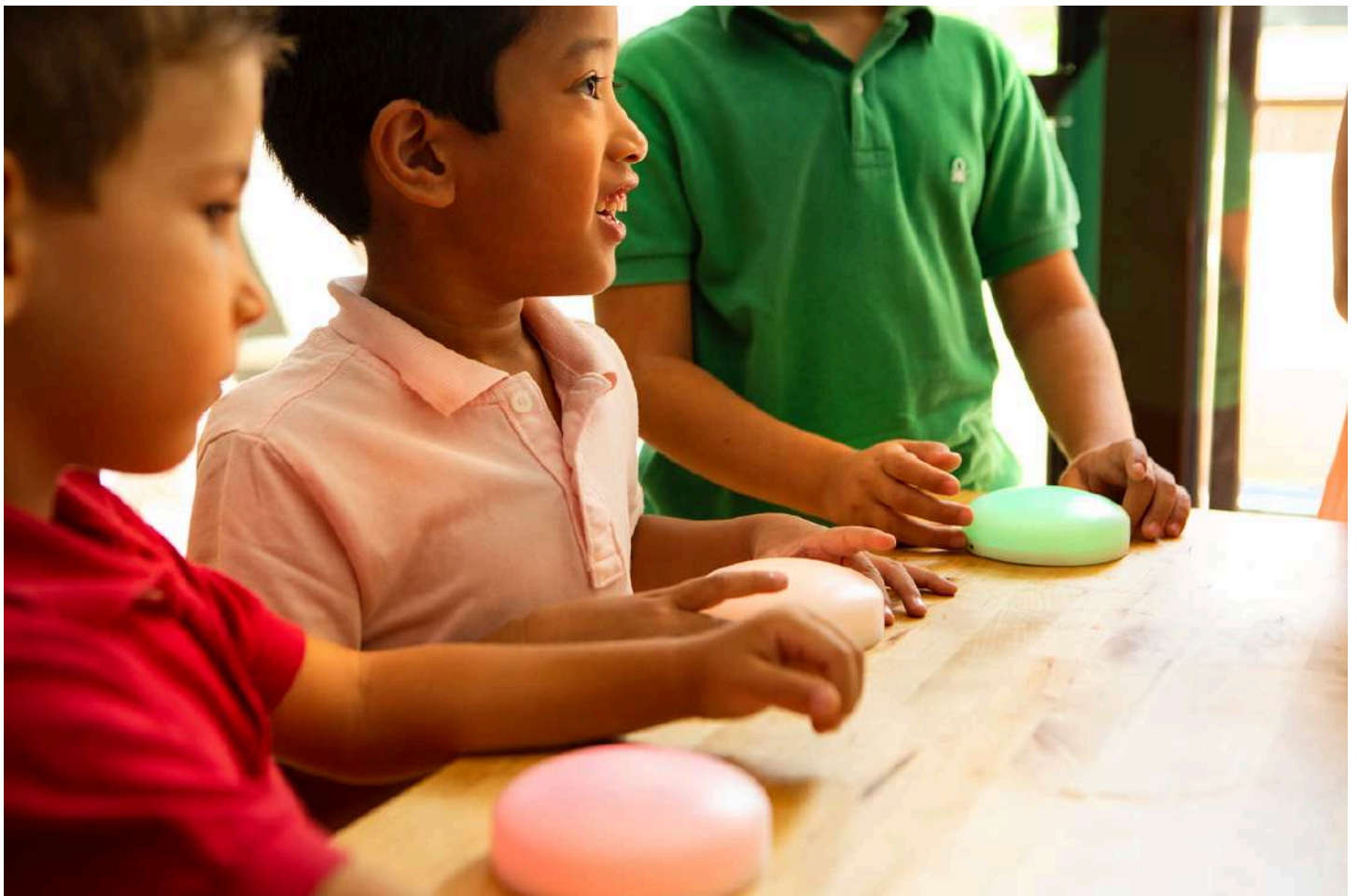
Goal: Impulse control and artistic development.

Setup:

- Cosmo Activity: Turn Taking
- 6 Dots
- Random OFF
- Min Duration: 3s
- Max Duration: 5s

Steps:

1. The Dots will light up in a specific sequence.
2. Explain that music only plays when the "active" Dot is pressed.
3. Each child must wait for their Dot to glow before pressing it to "keep the music alive."
4. Extra: Increase the difficulty by moving the Dots further apart.



# Key Stage 1

*Focused on more intense social interaction, logical thinking and building sustained attention*

## “Sports Day”

Goal: Coordination, fair-play competition, endurance.

Setup:

1. Cosmo Game: Showdown
2. 8 Dots
3. Activity Duration: 30 seconds
4. Music Track: Select
5. Sound: ON
6. Place the Dots around the classroom / corridor / gym
7. Split the class into teams of three

Steps:

1. Assign a specific color to each team.
2. Two teams at a time compete for 30 seconds to press as many Dots in their assigned color as possible.
3. Encourage the rest of the class to cheer for their peers.
4. Track scores and hold a "Grand Final" between round winners.



## “Number Detective”

Goal: Competition, Number sequencing, Reaction Speed

Setup:

1. Cosmo activity: Missing Numbers
2. 6 Dots
3. Sound: ON
4. Two Players: ON
5. Level: up to 100
6. Difficulty: Intermediate / Advanced
7. Activity Duration: 1 minute
8. Connect iPad to a bigger screen (HDMI or screen mirroring)
9. Press play and follow the app’s instructions to place the Dots in two sets of three

Steps:

1. Have two lines of students stand behind the sets of Dots.
2. A sequence appears on the screen with a missing number.
3. Learners must race to identify the missing number and press the corresponding Dot first.
4. Tip: This is a highly competitive activity. You can introduce students to this activity by toggling off Two Player mode and inviting students one by one to answer questions, allowing more thinking time

## Key Stage 2

Focused on reasoning, more advanced language building and problem solving skills, structured collaborative tasks and building real-world connections.

## “Number Race”

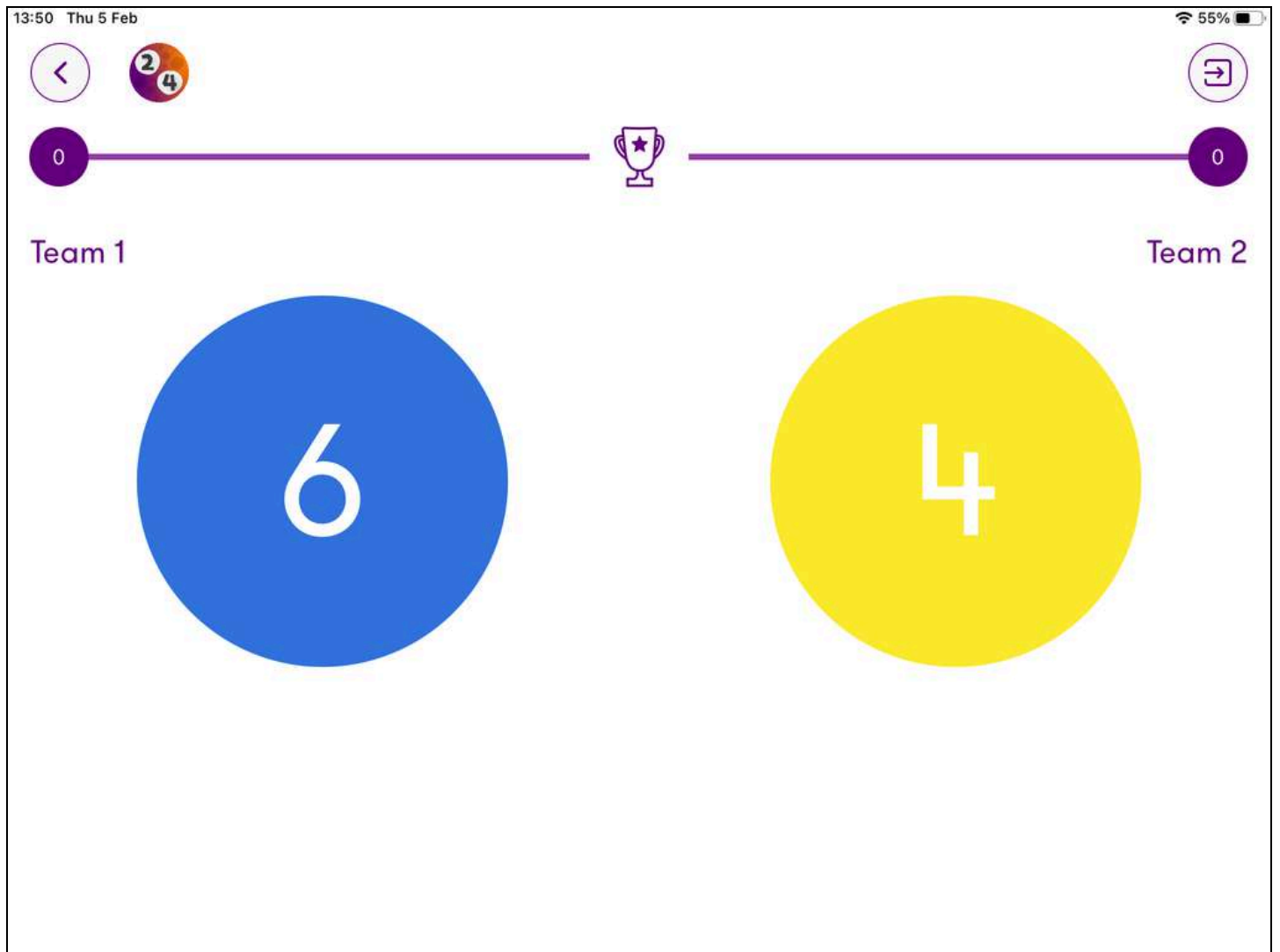
Goal: teamwork, counting, reaction speed

Setup:

1. Cosmo activity: Team Sprint
2. 6 Dots
3. Connect iPad to a bigger screen (HDMI or screen mirroring)
4. Target Score: 25, 50 or 100
5. Place the Dots all around the classroom / corridor
6. Divide students into two relay lines.

Steps:

1. The first student must run to press the colours indicated on the screen.
2. Once they hit their target, they run back to tag the next teammate.
3. The team must work together to reach the point total as fast as possible.



## “Reaction Speed Challenge”

Goal: Reaction Speed, Spatial Awareness, Focus

Setup:

- Cosmo activity: Whac’a’Mole
- 8 Dots
- Activity Duration: 1 minute
- Delay Time: 1 second
- Difficulty: Intermediate
- Place the Dots around the classroom
- Split students into groups of two students

Steps:

1. Learners must work collaboratively to press the Target Colour before it changes back to Distracting Colour.
2. Encourage all other students to cheer.
3. After a minute, invite two other teams to play.
4. To increase the challenge, move Dots further apart, change the "Delay Time" in settings to Instant and switch to Advanced Difficulty.

# Additional Learning Needs

## “Hello Cosmo”

Goal: cause and effect, early communication

Setup:

1. 1 Dot
2. Cosmo Activity: Sampler
3. Microphone Sensitivity: High
4. Recording Duration: 2 - 7 seconds
5. Press “Record” to record “Hello” onto the Dot.

Steps:

1. Model pressing the Dot while waving and saying “Hello”.
  2. Encourage the learner to press the Dot to say “Hello”.
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## “Sound Encounters”

Goal: cause and effect, auditory discrimination, movement control

Setup:

1. 1 Dot
2. Cosmo activity: Toggle
3. Music track: Select
4. Place one Dot near the learner

Steps:

1. Press the Dot to play music. Press it again to stop asking the learner “Where’s the music” and drawing their attention to the Dot.
  2. Repeat 3–4 times, while encouraging the learner to press the Dot independently.
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## “Morning Greetings”

Goal: expressive communication, conversational turn-taking

Setup:

1. Cosmo activity: Sampler
2. 3 Dots
3. Microphone Sensitivity: High
4. Record different greetings onto each Dot
5. Place Dots in front of your learners

Steps:

1. Press all Dots so that learners can hear what they say
  2. Model pressing the Dot using one phrase to “greet” another learner.
  3. Invite each learner to choose the Dot they want to press to greet their peers
  4. Encourage responses back and forth between peers
  5. Scaffold conversation with prompts: “Say hello to Mike!”
  6. Reinforce waiting for a response before pressing again.
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### “Tell Me More”

Goal: Intentional communication, making requests, sentence building

Setup:

1. Cosmo activity: Sampler
2. Record different parts of a sentence onto the Dots e.g.
  - Dot 1: “I want”
  - Dot 2: “Drink”
  - Dot 3: “Toy”
  - Optional Dot 4: “Please” or adjectives ("Sweet", "Cold", "Favourite")
3. Up to 6 Dots

Steps:

1. Ask: “*Can you tell me what you want?*”
  2. Press the Dots one by one so that students can hear all the words
  3. Model pressing Dots in order to build a phrase (e.g., “I want” + “drink”).
  4. Prompt the student to tap the Dots in a sequence.
  5. Reinforce the *whole phrase* by repeating it back and offering the item.
  6. Gradually increase complexity: e.g., add adjectives, sentence starters (“I feel...”)
  7. Use *real conversations* as a context: snack time, choosing a song, break time, etc.
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## Project Plan: Underwater Expedition with Cosmo

### About this project

In this project, students embark on an immersive ocean-themed journey using Cosmo. By interacting with aquatic sounds, vibrant imagery, and marine facts, learners develop essential skills in **sensory awareness, cause-and-effect, and vocalisation**. This multi-sensory approach also targets key developmental milestones, including **turn-taking, sustained attention, and reading comprehension**.

**Primary Goals:** Cause & Effect, Sensory Integration, Turn-taking, and Vocabulary Building.

### How to use this project

This guide follows a scaffolded approach, exploring the ocean theme through increasing levels of challenge. It is designed for maximum flexibility: follow the sequence for a comprehensive one-hour expedition, or select and adapt individual activities to fit shorter modular lessons throughout the week.

## Summary of the activities

**Activity 1:** Hello, Cosmo! (Warm-Up)

**Activity 2:** The Descent (Introduction)

**Activity 3:** Storytelling (Core)

**Activity 4:** The Rhythmic Reef (Music)

**Activity 5:** Deep Sea Recall (Memory)

**Activity 6:** Ocean Quiz (Knowledge)

**Activity 7:** Surfacing (Breathing Exercise)

**Activity 8:** Beach Relaxation (Final Relaxation)

## Preparation Checklist

### Cosmo Setup

- Device: iPad/Tablet with Cosmo Learning App & Big Screen (HDMI/Mirroring).
- Hardware: 6+ Cosmo Dots and a dark tray (to make Dot colors pop).
- Cosmo activities: Sampler, FishTank, Storytelling, Video Storytelling, My Orchestra, Bubbles, Summer Beach.

### Sensory & Prop Bin

- Visual: Blue/green ribbons, sequined paper, soap bubbles.
- Tactile: Sand, pebbles, seashells, ice cubes, water spray bottle.
- Scent: Ocean/Sea Breeze essential oils.
- Taste: Edible seaweed, blue/green jelly
- Auditory: Drums, shakers, alternatively bottles with rice / peas inside

### Communication Aids

- Flashcards: Crab, dolphin, seagull, eel, octopus, turtle, sand, waves, beach ball, boat, bubbles, ocean, splash, sun, wind
- AAC: Pre-programmed folders for "Ocean Animals" and "Actions" (Splash, Dive, Bubbles)

## Step by step

### Activity 1: Hello, Cosmo!

… Welcome everyone! Today, we're going on an underwater adventure. We're going to explore the ocean and animals that live in it. Are you ready to join me? Let's dive in and look for the animals!

**Objective:** early communication, cause and effect, choice-making. We're learning how to press the Dots and what happens when we press them.

**Setup:**

- Lower the blinds and play relaxing [underwater YT visuals](#) on the big screen (Use interactive sensory equipment if you have access to it).
- Place the Dots on a tray and light them up in shades of blue and green (Change colours in *Dot Settings*).
- Prerecord various greetings into *Sampler* ("hello", "good morning", "howdy" etc.)
- Have students sit in a circle on the floor or at their desks.

**Steps:**

1. Bring the tray in front of every student to choose their favourite greeting and greet everyone. They can also do this with their communication devices.

## Activity 2: The Descent

**Objective:** Cause and effect with one Dot. Introduction to the theme. Sensory exploration.

**Setup:**

- Open *FishTank* on the big screen (connect iPad via screen mirroring or with HDMI cable)

**Steps:**

1. Model how pressing a Dot "brings a fish to life" on the screen, emphasising the immediate cause-and-effect feedback.

… Divers, we've found the fish! Let's explore other ocean animals. We're going to join Razia, a girl who wants to learn to swim but she's afraid of water. Let's help her!

## Activity 3: Narrative Exploration

**Objective:** A focused activity based on sensory exploration and turn-taking. Builds vocabulary, comprehension, and attention.

**Setup:**

- Launch *Storytelling > Razia Learns to Swim* (keep the iPad connected to a big screen)
- Hand out a set of props to the Teaching Assistants and your students

**Steps:**

1. As you narrate the story, have students press the Dots in order to hear the sounds matching the narrative.
2. As the story progresses, use your props to teach specific tactile and spatial concepts.
  - Wet/Dry: Use the water spray or soap bubbles during "splashing" scenes.
  - Rough/Smooth: Pass around seashells or sand when the story mentions the ocean floor.
  - Deep/Shallow: Have children reach for "Deep" Dots on the wall or "Shallow" Dots on the table to practice gross motor skills and body awareness.
3. Ask 3 comprehension questions to end with (use flashcards and AAC devices to answer).
  - *What was the girl's name?*
  - *What animals did she see?*
  - *Which was your favourite animal?*

## Activity 4: The Rhythmic Reef

💬 *Let's dive in and explore some ocean music! The reef is having a party! Press your Dot to keep the music playing.*

**Objective:** Musical exploration, turn-taking, rhythm.

### Setup:

- Open *Video Storytelling* on the big screen (Music: *Under the Sea, Little Mermaid*).

### Steps:

1. Students press the Dots in turn to play the song.
2. Encourage students to clap or stomp their feet to keep rhythm
3. Use instruments to play along.

## Activity 5: Deep Sea Recall

**Objective:** Auditory memory and listening comprehension.

### Setup:

- Open *Storytelling > Razia Learns to Swim* again

### Steps:

1. This time, don't read the story, but ask students to press the Dots as they light up and listen to the sounds.
2. With each sound, ask students what they can hear and what happened in that particular moment of the story.

💬 *Listen... what was that sound? Was that a splash or a seagull?*

## Activity 6: Ocean Quiz

**Objective:** Builds knowledge about the ocean. Attention, comprehension.

## Setup:

- Open *My Orchestra* (no sound)
- Play [video quiz](#) on YT

## Steps:

1. As you play the video, pause it at key questions.
2. Students must answer the question either speaking or using flashcards or AAC devices and then press the Dot to light it up to indicate they know the answer.

☰ *Time for a challenge! Who knows:*

1. *Is the ocean big or small?*
2. *Can we drink ocean water?*
3. *How many oceans are there on our planet?*
4. *Do fish live in the ocean?*
5. *Do turtles live in the ocean?*
6. *Does the wind make the waves?*

## Activity 7: Surfacing

**Objective:** Relaxing activity guiding students towards the end of the session.

### Setup:

- Opens *Bubbles* (Number of Bubbles: 3)

### Steps:

1. Everyone breathes in and out for 3 as the bubbles pop on the screen

☰ *Time to float back up. Breathe in with the bubble... and pop.*

## Activity 8: Beach relaxation


**Objective:** Final relaxation. Calming station of a sensory circuit.

### Setup:

- Open *Summer Beach* on a big screen.
- Ask students to put their Dots back on a tray.
- Encourage students to lie down comfortably.

### Steps:

1. Teacher brings a tray with Dots to each student one by one and encourages them to press their favourite coloured Dot to trigger audio-visual elements.
2. Everyone else names the element, makes the sounds, looks for symbols on their AAC device or uses a flashcard.

 *We've reached the surface. Let's lie down on the beach and relax.*