Cosmo – Skill Development/Curricular Connections

Activities in *Italics* are not part of the smaller set.

All Cosmo activities can be used to develop foundational switch skills. There are activities that help with:

- Selecting within a time limit
- Turning a switch on/off
- Holding a switch

Activity	Skills	Curricular Connections	Additional Materials Needed
Exploration Touch the cosmoid that is lit up and the song that has been selected will play until the student stops touching the cosmoid.	Cause and effect/ Turn taking/ Expressing preferences/ Gross and Visuo-motor control/ Spatial awareness/ Musical self-expression	Switch training – hold and release Vocabulary: Hold, release	
My Orchestra Build songs by adding drums, guitars, pianos, and many other instruments, solo or as part of a group. One student can be the conductor.	Auditory perception Visual perception Expressing preferences Auditory discrimination Joint attention Collaboration Visuo-motor control Spatial awareness	**Music:** Experiment with sounds and instruments Work cooperatively with others to create music **Vocabulary**: Start/stop	
My Voice Students record their own voices (the same recording is played on all active cosmoids)	Cause and effect Auditory discrimination Verbal communication Visuo-motor control Vocalisation Musical self-expression	Shared Reading Turn-taking Use ordinal numbers to identify the order of students **How**: Choose a book with a repeated pattern. Read the book and identify the repeated pattern. Then, have a student (or teacher)	Picture book with repeated pattern Number cards, ordinal number cards

		record the repeated pattern and then give each student a cosmoid to use when the teacher gets to that repeated pattern. Could also record other things like turn the page, I love it, that's funny, what's next, etc.	
Turn-Taking Work together to play favourite songs - each cosmoid triggers part of the song and lights up to show whose turn it is. The longer you press, the longer the song plays for.	Cause and effect Turn taking Expressing preferences Gross and Visuo-motor control Spatial awareness Musical self-expression Collaboration	**Vocabulary:** Start/stop Long/short Your turn, my turn	Vocabulary: Start, stop, long, short, your turn, my turn
All the Same Sequencing and problem-solving - each press on a cosmoid changes it's colour; keep touching the cosmoids until they are all the same colour.	Sequencing Problem Solving Joint Attention Collaboration Communication Gross and Visuo-motor control Reaction Speed	**Patterning and Algebra:** (on easy and medium setting only) Identify the colour sequence (pattern). Create different sets (e.g. three sets of two). Express the set in numbers (e.g. 2 + 2+ 2) **Number Sense:** Create, count and match sets of 1-6 or any amount and match or write the numeral; compare amounts of sets and describe as more, less, or equal amounts Subitize amounts between 1-6. Match amounts to dice pattern or ten frame **How**: Make a certain number of one colour and a certain number of another colour (e.g. 3 red and 3 green) **Colour Matching/Naming:**	Number cards, operation symbol cards, colour cards, dice patterns, ten frames, colour word cards/. Vocabulary cards: Colours, pattern, more, less, equal

		One student taps and stops on a colour – all students need to match that colour Match colour to word – hold up a colour word and students match the cosmoids to the colour name.	
Colour Matching Work as a pair to find two of the same colour. Then partners simultaneously touch a button of that colour.	Visual perception & discrimination Problem solving Reaction to visual stimuli Collaboration Colour vocabulary Joint attention Visuo-motor control Colour vocabulary	**Colour matching** **Colour naming** (if turn off sound) match objects by colour; identify and name primary and secondary colours **Vocabulary**: same/different red, yellow, blue, green, orange, purple pair	Colour and colour name cards Vocab cards: same, different, red, yellow, blue, green, orange, purple
Fireworks Touch the cosmoid that is lit up – a song will play until the student stops touching the cosmoid.	Cause and effect Turn taking Expressing preferences Gross and Visuo-motor control Spatial awareness Musical self-expression	**Switch use:** Students must touch to start the fireworks and release in order to select again.	Beginning switch use
Cosmonaut Individual game-like activity – make the cosmonaut fly across the screen. The harder students press, the higher he flies. See if you can get a high score!	Cause and effect Visual perception Concentration Fine & Gross motor skills		
All Different Make sure that no two cosmoids are the same colour. This can be done with a timer.	Sequencing Problem solving	**Colour Naming:** Identify the colours as they are chosen. (timer off) *(turn off random setting)* Patterns, Sequences: Identify colour	Colour cards, colour word cards **Vocabulary**: Same, different, colour words

		sequence (can say or use colour cards to show) **Vocabulary:** same/different, colour words **Collaboration:** when played with a partner, students need to ensure that they work together.	
Copy Me Sequencing activity – observe the light sequence on the cosmoids and repeat it.	Memory Pattern recognition Visuomotor skills	**Math: Patterning and Algebra** Recognize and copy a visual and auditory pattern. Describe the pattern. Use ordinal numbers from first to sixth **Language**: positional words (left, right, middle) 1st, 2nd, 3rd, 4th, 5th, 6th	Colour word cards, colour cards
While It's Lit Press the green button before it turns red to get a point.	Reaction speed Gross motor skills Attention	**Math: Data Management** Work in teams, taking turns to get points. Use a tally chart to count, then construct a pictograph bar graph to compare the points for each round to see who the overall winner is. Math Vocabulary: more/less, greater than, less than, tally, graph	Graph paper, tally chart, number cards **Vocabulary**: more/less, greater than, less than
Story Telling Perform sensory stories by touching the cosmoids when it's your turn to add to the story. Press it when it's your turn and let the story unfold.	Sensory integration Sequencing Turn-taking Waiting Visuo-motor control Spatial awareness Communication Joint attention	Colour matching Shared Reading Make a prediction about what the sound will be, or about the story	Colour and colour word cards Shared reading communication display (turn the page, look, I like, picture, favorite)
Video Story Telling	Visuo-motor control	Switch training	

Play video stories – place a pause at different points that is cancelled with a tap on the cosmoid. (add custom videos from youtube)	Reaction time Turn taking Attention		
Exercise Designed to get students moving by placing cosmoids around a space.	Cause and effect Visual perception & discrimination Collaboration Speed of response Spatial awareness	**Math: Number Sense (counting) and Data Management (graphing)** • demonstrate cardinality of number after counting a set by stating total amount • use tally chart to graph and compare data **How***:* One team runs from cosmoid to cosmoid while the second team tallies the number of hits for each colour and uses a bar graph to represent it. **Vocabulary:** more/less, greater than/less than	Number cards, graph paper, tally chart Vocabulary: More, less, greater than, less than, equal
Show Down Competitive activity for 2-6 players. One team finds the buttons of a specific colour and the other team finds the buttons of a different colour before the time runs out.	Cause and effect Turn taking Expressing preferences Gross and Visuo-motor control Spatial awareness	**Math: Number Sense:** Colour matching • Counting amount in set: • demonstrate cardinality by repeating last number after amount is counted • demonstrate one-to-one correspondence counting number of taps; • identify sets and match the numeral to the set; • identify sets of and write(stamp) the numeral of the set) **How**:	Number cards, greater than, less than, equal, tally charts Vocabulary: Colours, more, less

		Count the number of taps on your team colour – see if it matches what the app counts. (we recommend music is off to support focus on counting) • identify two sets that have equal amounts; • compare amounts of two sets and describe as more, less or equal amounts; • construct a pictograph bar graph to compare **How**: Compare total points for each team. Express as greater than/less than (e.g. 11 (team 1) > 15 (team 2)) **Vocabulary:** Colour names More/less	
Tap Dash Video game – Touch the cosmoid that matches the falling colour block on the app.	Attention Motor skills Collaboration (with 2+ players)	**Reaction time** **Colour Matching** **Identify the colour name** **Math: Number Sense:** • compare sets that are equal, more and less **How**: When played in teams, compare total points for each team. Express as greater than/less than (e.g. 11 (team 1) > 15 (team 2)) *Can change to dark mode – good for students with visual impairment*	Colour and colour word cards, greater than, less than, equal cards Vocabulary: More, less, equal

Toggle Choose a colour and press the cosmoid to start the music; press again to stop the music.	Attention Listening Cause and effect	**Colour naming:** identify the colour chosen each time. **Vocabulary:** start/stop, on, off, dim, bright	Colour and word cards Vocabulary: Start, stop, on, off, dim, bright
Improvisation Select a backing track and instrument. Then touch the cosmoids to play along. (can add sounds from Spotify or Garageband)	Auditory and visual discrimination Motor control Spatial awareness Attention and Memory	**Music:** • Experiment with sounds and instruments • Use patterns to create simple notation • Work cooperatively with others to create music • Arrange the cosmoids from high to low notes **Math: Patterning and Algebra** Create an auditory pattern with one tap per cosmoid, then have a partner copy/repeat it. Create a pattern with different numbers of taps (e.g. low note – 1 tap, middle note – 2 taps, high note 1 tap) and have a partner repeat it Vocabulary: high/low	