

Core Skills Analysis

Mathematics

- Recognised and compared quantities such as the number of items on a screen, developing one-to-one correspondence.
- Applied basic measurement concepts by adjusting sizes of objects (e.g., food portions) and observing the effect on outcomes.
- Practised sequencing and ordering by arranging characters or items in a logical flow to achieve a goal.
- Developed spatial awareness through dragging, rotating, and positioning objects within a digital environment.

Science

- Observed cause-and-effect relationships when actions (e.g., cooking food) produced changes in temperature, colour, or state.
- Explored simple properties of materials by testing how different substances (water, oil, solids) behave in virtual experiments.
- Identified basic life-cycle stages of virtual pets or characters, reinforcing concepts of growth and needs.
- Engaged in hypothesis testing by predicting what will happen if a character is placed in a specific setting.

Language Arts

- Expanded vocabulary by reading on-screen labels, menus, and character dialogues.
- Practised narrative skills by creating storylines for characters through role-play scenarios.
- Improved comprehension by following instructions and interpreting visual cues to complete tasks.
- Enhanced expressive writing by describing actions taken in the app after play, using past-tense verbs.

Technology & Computing

- Developed digital literacy by navigating menus, tapping icons, and using touch-screen gestures.
- Learned basic programming logic such as loops and conditionals when repeating actions to achieve a result.
- Practised problem-solving by troubleshooting why a character's need was not met and trying alternative solutions.
- Gained awareness of user-interface design through observation of how layout influences ease of use.

Art & Design

- Explored colour theory by selecting and mixing virtual paints or outfits for characters.
- Experimented with composition by arranging items in a scene to create aesthetically pleasing layouts.
- Cultivated creativity by customizing environments, encouraging personal expression and style.
- Observed balance and proportion when scaling objects, reinforcing visual harmony concepts.

Tips

To deepen the learning from a Toca Boca session, set a challenge that requires the child to design a

“perfect day” for a character, then map out the steps on paper before playing. Follow the game with a reflective journal where they record what worked, what didn’t, and why. Extend the experience with a hands-on activity: recreate a favorite virtual scene using craft materials, measuring and labeling each part. Finally, connect the digital play to real life by cooking a simple recipe or building a small model that mirrors the app’s scenario, reinforcing the science and maths concepts observed.

Book Recommendations

- [The Magic School Bus Inside the Human Body](#) by Joanna Cole: A lively adventure that explains how bodies work, linking the cause-and-effect ideas children see in digital games.
- [How to Code a Sandcastle](#) by Josh Funk: Introduces basic coding concepts through a playful story, echoing the logical sequencing used in Toca apps.
- [Rosie Revere, Engineer](#) by Andrea Beaty: Celebrates creativity, problem-solving, and perseverance—key attitudes nurtured while designing virtual worlds.

Learning Standards

- Mathematics - Number and place value (MA5), Measurement (MA5), Geometry (MA5)
- Science - Living things and their habitats (SC5), States of matter (SC5), Forces and magnets (SC5)
- English - Vocabulary acquisition (EN5), Reading comprehension (EN5), Writing to plan, draft and revise (EN5)
- Computing - Algorithms and programming concepts (CP2), Use of technology safely and effectively (CP2)
- Art & Design - Using colour, texture and form (AT2), Creating and evaluating ideas (AT2)

Try This Next

- Worksheet: "My Toca Story Map" - students draw a start-to-finish flowchart of a character’s day, labeling actions with verbs and numbers.
- Quiz: Create 5 multiple-choice questions about cause-and-effect scenarios observed in the app (e.g., "What happens when you heat water?").
- Drawing Prompt: Design a new room or environment for the game, annotate with measurements and colour choices.