

TEACHER'S GUIDE



10 fingers

The special feature of this app is that you can use it either with the Smart Numbers wooden numbers, or simply with your fingers if you don't have the wooden toys. If you play only with your fingers some levels or activities will remain shaded and inaccessible. You can however access 90% of the app without needing any additional hardware.

App Topic: Maths, counting to 10, recognizing numbers, number and quantity correspondence, decomposing numbers

Target Population: Preschool and Grades K-1, Exceptional Education, English Language Learners

Common Core Standards:

- **K.C.C.:** Counting and number names
- **1.OA:** Represent and solve problems using addition

Educational Goals:

- Recognise the written form of digits 0 to 10
- Orally recognise digits from 0 to 10
- Recognise quantities from 1 to 10
- First approach to zero:
 - 'zero is nothing'
- Know the counting song (one, two, three,...ten)
- Enumerate objects showing them one by one
- Enumerate objects rapidly (subitizing)
- Recognise constellations (pictures are positioned as on a dice)
- Know that two quantities can be put together (introducing addition)
- Know how to count to ten in a foreign language

Specific 21st century skills:

- **Critical Thinking-** Students use manipulatives to represent numbers and objects.

Lesson Instruction

Suggested Classroom Usage: Small groups, Center work, individual activity

Vocabulary: Number, count, object

Materials: 10 fingers app, Smart Numbers, iPad or Android tablet, headphones

- **Connection to previous teaching:** Naming numbers, counting to 10, recognizing small groups of objects and how many there are with or without counting
- **Teaching:** Using the 10 fingers app and tablet, teacher demonstrates how to use Smart Numbers and fingers.
 - Counting objects
 - Matching groups of objects with Smart Number or fingers
 - Recognizing small groups of objects without counting (subitizing)
 - Adding small groups of objects up to 10
- **Student Engagement/Learning Experiences:** Individually or in small groups, students manipulate Smart Numbers to explore numbers 1-10
- **Assessment:** Teacher observes to determine students' knowledge of numbers 1-10.

How to use 10 fingers?

On the home screen you have four choices:

'3': Recognizing the shape of numbers

'3 snails': Quantities, Constellations

'1 hand': Decomposing numbers

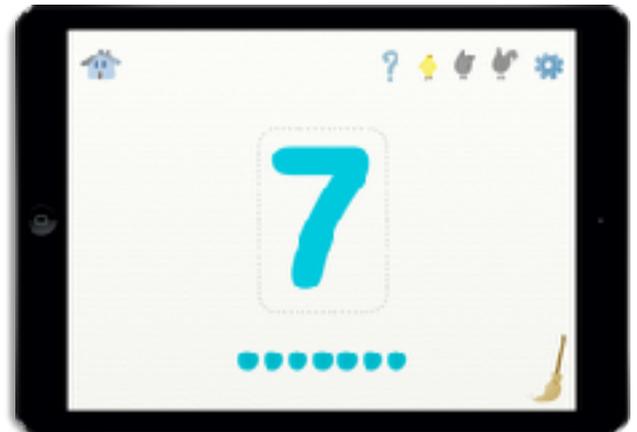
'2 hands': Learning to add



Activity '3': chick, free mode

Only using the wooden numbers

Stamp a wooden number on the screen. The corresponding number and quantity of beads appear on the screen, the app says the number.

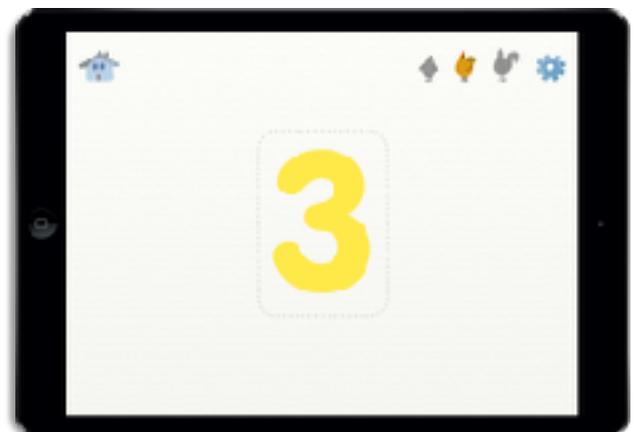


Activity '3': challenge modes

Only using the wooden letters

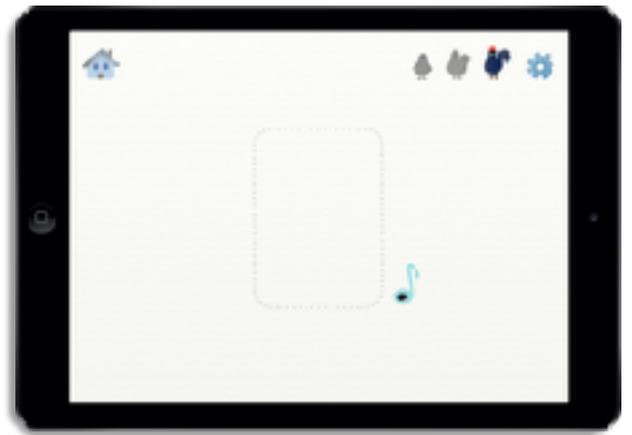
Hen mode

A number appears on the screen. Stamp the corresponding wooden number on the screen. A sound tells you if your answer is correct. The app counts the quantity of beads as they appear under the number.



Rooster mode

The app says a number. Stamp the corresponding wooden number on the screen. A sound tells you if your answer is correct. The app counts the quantity of beads as they appear under the number.



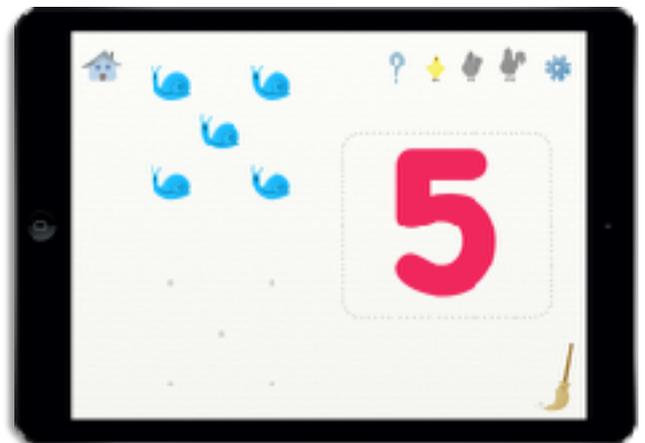
'3 snails' activity: chick - Free mode

Only using your fingers

Touch the gray dots on the screen with your fingers. Snails appear as you touch the gray dots. The app says the numbers as you go. The corresponding number also appears in the box on the right depending on the number of snails.

Using the wooden numbers

Stamp a number on the screen. The number of snails corresponding to the number stamped appears, the app says the number.



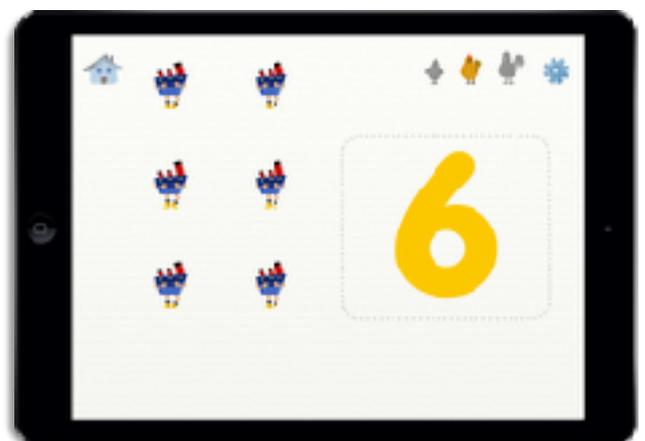
'3 snails' activity: Challenge modes

Hen mode (with the wooden numbers)

Count the number of objects you can see on the screen and stamp the corresponding wooden number on the screen. A sound will tell you if your answer is correct.

Rooster mode (with your fingers)

Place the objects corresponding to the number in the box on the right hand side of the screen by touching the gray dots. A sound will tell you if your answer is correct.



'1 hand' activity: Free mode

Using only your fingers

Touch the screen with your fingers in the cloud. A number and the corresponding quantity of beads appears on the screen.



'1 hand' activity: Challenge modes

Using only your fingers

Hen mode

Count the number of beads you can see on the screen. Place the same number of fingers in the cloud. A sound will tell you if your answer is correct. The corresponding number will appear.



Rooster mode

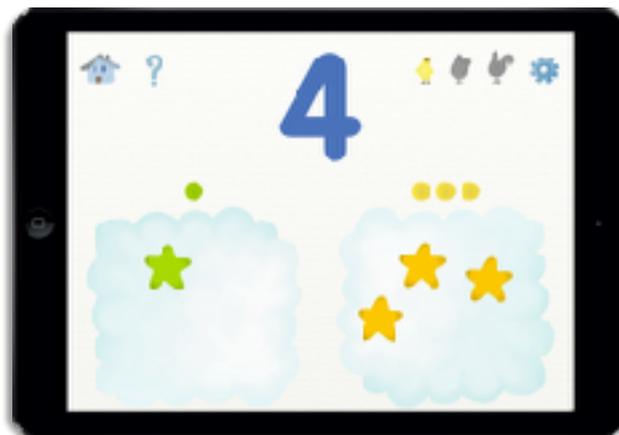
A number appears on the screen. Place the same number of fingers in the cloud. A sound will tell you if your answer is correct. The corresponding quantity of beads will appear.



Activité « 2 mains » : poussin - mode libre

Uniquement avec les doigts

Placez vos doigts dans les deux nuages. Les quantités associées à chaque nuage apparaît à l'écran sous forme de perles. La somme des deux nuages apparaît sous la forme d'un chiffre.



'2 hand' activity: challenge modes

Using only your fingers

Hen mode

Count the number of beads you can see on the screen. Place the same number of fingers in each cloud. A sound tells you if your answer is correct. The corresponding number appears.



Rooster mode

A number appears on the screen. Place your fingers in the cloud to obtain the number 8 (e.g. 4 fingers + 4 fingers or 5 fingers + 3 fingers). A sound tells you if your answer is correct. The corresponding quantity of beads appears.



Settings

Each activity has its own settings.

For example you can choose a minimum and maximum number to use for the activities.

The settings mean you can personalize the app for each child.

