Adventures in Space focuses on counting. The activities include counting orally to 20, counting and one-to-one correspondence to 10, counting from any given number, relating numbers and quantities, counting to answer “how many,” comparing quantities, and using ordinal words through fifth.

The activities are sequenced by counting order. The module is directed at the concrete level with pictorial representations on the activity mats. Written numerals are not introduced.

The activity mats are clustered for easy repetitive organization and thorough practice.

This module can be used as a review or an introduction to counting with one-to-one correspondence. Basic familiarity with space-related vocabulary is required.

NOTE: Scout is referred to as both male and female throughout the copy.

Prerequisites ....................... 00
Objectives ............................ 00
Vocabulary ............................. 00
Materials ............................... 00
Activity Record ....................... 00
Instructional Strategies ............. 00
  • Number 1: Activity Mats 00-00
  • Number 2: Activity Mats 00-00

Counting Assessment ............... 00
Extensions ............................. 00
  • Literacy
  • Centers
  • Home-School

Preparation for Kindergarten
Common Core State Standards
K.CC.1, K.CC.2, K.CC.4, K.CC.5, K.CC.6

Prerequisites
  • Count orally to 5
  • Use a crayon or marker
  • Understand basic space vocabulary

Objectives
1. To count orally to 20
2. To use one-to-one correspondence to count to 10
3. To count from a given number
4. To relate numbers and quantities
5. To count to answer “how many”
6. To compare quantities
7. To use ordinal numbers through fifth

Vocabulary
  • compare
  • equal
  • first
  • fourth
  • how many
  • less
  • more
  • second
  • third

Materials
  • Space objects or counters
  • Crayons or markers
  • Classroom supplies (pencils, tables)
  • YouTube videos
  • Music
  • Theme badges (Appendix E)
Module 1 @ Counting

Activity Mats 1-3

One-to-one correspondence for 1
Oral counting to 5

● Space objects for counting (if available)
● YouTube video of a spaceship launch
● Crayons or markers

Number 1

I have 1 pencil, 1 star, 1 crayon.
I have 1 head, 1 nose, 1 belly.

Show me 1 head, 1 nose, 1 belly.
Show me 1 jump, 1 nod of your head, 1 clap of your hands.
Show me 1 finger, 1 hand, 1 foot.

Use a number song for 1 or a simple rhyme:

I am 1 (boy or girl)
I have 1 head.
I have 1 nose.
I have 1 belly.
When I giggle, I wiggle!

Reinforce 1 during calendar time, job chart, attendance chart, and in line, by modeling and having the children repeat your action. Practice oral counting to 5 when the children are being seated for meals, circle time, etc.

Introduce Scout and the journey in space.

Scout is an astronaut. Scout can be a boy or a girl. When you are a little older you may be a boy scout or a girl scout. Scout gathers things on his adventures. She is making a trip into space.

Show a short YouTube video of a spaceship launch.
Discuss objects in space.
Distribute space counting objects. Use the objects to match or identify the objects in space:

- 1 moon
- 1 spaceship
- 1 cloud
- 1 star

Scout’s spaceship leaves the Earth and circles the moon. What does Scout see? Help Scout steer around the objects in space to land safely on the moon.

Continue to identify the number of objects in the pictures:

- 1 spaceship
- 1 space rock
- 1 shooting star
- 1 planet (Earth)
- 1 moon
- 1 space station

Small Groups

Provide space counting objects (or other counters) at the tables.

EMERGING

(Use the counting objects and the samples below.)
Show me 1 spaceship. Say "1 spaceship."
Show me 1 star. Say "1 star."
Show me 1 moon. Say "1 moon."
(Repeat with objects on mats 2 and 3.)

DEVELOPING

Match objects to the pictures.
Place an object on the spaceship.
Place 1 object on the star. Say "1 star."
(Continue with the objects on all three activity mats.)

MASTERING

Use the objects on mats 1 and 2.
Use the pictures only on mat 3.

Provide the space objects for free play at the sand table. Model and encourage storytelling, repeating the sample sentence "1 spaceship leaves the Earth."
Scout lands on the moon and plants a flag to show that an American has been there. She explores the moon. What do you think Scout sees on the moon?

- Distribute mat 4 and space counting objects.
- Place and count 2 objects on the pictures.
  - 2 stars
  - 2 planets
  - 2 craters (holes) on the moon

Did you guess the things Scout explored on the moon?

- Reinforce the body parts that are in twos: eyes, ears, shoulders, arms, hands, hips, legs, knees, ankles, feet.
- Identify them on Scout.
- Identify the 2 objects:
  - 2 space rocks
  - 2 small craters
  - 2 large craters
  - 2 footprints

One-to-one correspondence for 2
Oral counting to 5

Space objects for counting
Crayons or markers
Astronaut badges (Appendix E)

Number 2

(Count 1, 2 while modeling.)
I have 2 eyes, 2 ears, 2 feet.
I jump 2 times.
I bow 2 times.
I touch my nose 2 times.

Count 1, 2 as you show me your 2 eyes, 2 ears, 2 feet.
Jump 2 times. Bow 2 times.
Touch your nose 2 times.
Show me 2 fingers.

Sing the “Hokey Pokey” song.
Ask the children to place 1 hand in, then the other hand, then both hands. Have them “shake them all about.”

Continue to reinforce 2 throughout the day. Give each child an astronaut badge. Have each “gather” 2 objects while wearing the badge. Have them bring the objects to the small group tables for counting.

Small Groups
Use the objects the children gathered in the classroom. Count each set of 2.
Demonstrate that 2 comes after 1 in counting order. Also show that 2 is more than 1.

EMERGING
Continue with the classroom objects for counting sets of 2. Introduce the space objects. Have them children count and place them in groups of 2.

DEVELOPING
Have the children match the sets of 2 counting objects to sets of 2 space objects. Reinforce that 2 can be 2 of anything. Then, match the space objects to pictures on the activity mats.

MASTERING
Complete the “developing” activity for mat 4. Touch, count, and say the sets of 2 in the pictures on mat 5.

Provide markers or crayons and a badge for each child to decorate. Encourage the children to include their favorite colors and some things they like about space.