## Hip Hop Hippos

A book about numbers and relative position

## Aim

The number representation of relative position is

challenging for young students because it uses abstract symbols (numerals) rather than quantity representation. Hip Hop Hippos introduces the relative position of numbers 1 to 10 .

These whole-class activities provide students with the opportunity to:

- listen to a story about the relative position of numbers 1 to 10
- use materials to act out the story
- use the Teaching Tool to act out the story
- identify numbers that are before, after, and between the numbers 1 to 10
- describe the relative position of numbers 1 to 10


## Activities

1. Listening to the story
2. Making a number track
3. Introducing numbers before and after
4. Introducing numbers between
5. Moving forward and back
6. Using the teaching tool to move forward and back

7. Using materials to act out the story
8. Using the teaching tool to act out the story
9. Using the teaching tool to describe relative position
10. Identifying numerals 1 to 10

## I. Listening to the story

## Resources

- Hip Hop Hippos


## Activity

Show the cover of Hip Hop Hippos to students and read the title aloud. Encourage volunteers to predict what they think the story might be about. Slowly read the story. Then ask, What happened in the story? What did you see in each picture? Encourage students to explain that the hippos were jumping on the number track numbers. Ask, What numbers were on the number track? In what order were the numbers on the number track? Read the story again and have the students answer the question that is posed on each double-page spread. For example, on pages 6-7 students will identify the number that is just before 4 on the number track. Repeat for each double-page spread.

## 2. Making a number track

## Resources

- Connecting cubes
- Light-colour dot stickers


## Preparation

Each student will need 10 connecting cubes and 10 dot stickers.

## Activity

Ask the students to count their stickers and then write the numerals for 1 to 10 on them (one numeral on each sticker). Then have them place one numbered sticker on each connecting cube and connect the cubes in numerical order to make a number track. Once the number tracks are completed ask questions such as, What numbers are on the track? What numbers are greater than four? What number is between six and eight? What number is just after three? What number is just before two? Extend the activity by arranging the students in pairs. Ask them to break up and remake their tracks, then ask each other similar questions to those above.

## 3. Introducing numbers before and after

## Resources

- 10 large blank cards


## Preparation

Use the large cards to create a 1 to 10 number track for the floor. Place the cards on the floor in the arrangement shown below and so that all the students can see.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Activity

Discuss the number track. Ask, What numbers can you see? What is the first number on the number track? What is the last number on the number track? Select a volunteer to stand beside a number facing toward number card 1 and have them identify the numbers on the number track that come before their number. Then have the volunteer turn to face number card 10 and identify all the numbers on the track that come after their number. Repeat for other numbers on the number track. To extend the activity, have students identify numbers just before and just after the number they are beside.

## 4. Introducing numbers between

## Resources

- The Number Case Year K
- Hip Hop Hippos
- Transparent counters


## Preparation

Each pair of students will need a 1 to 10 number track from The Number Case and two transparent counters.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Activity

Read pages 12-13 of Hip Hop Hippos. Show the illustration to the students and have them identify which numbers the hippos have landed on. Ask them to place their counters on the matching numbers of their number track. Then ask a confident volunteer to identify the numbers that are between the counters. Continue the activity by asking the pairs of students to take turns to place counters on the number track, so that the other student names the numbers that are between. Extend the challenge by asking students to name pairs of numbers that have two numbers between them, three numbers between them, four numbers between them, and so on.

## 5. Moving forward and back

## Resources

- The Number Case Year K
- Transparent counters
- 1 large blank cube


## Preparation

Label the blank cube: forward 1, forward 2, forward 0, back 1, back 2, back 0. Each pair of students will need a 1 to 10 number track from The Number Case and one transparent counter.


## Activity

Ask each pair of students to place their counter on number 5 . Next, invite a volunteer to roll the cube and call out the direction showing on the top face. Have the students move their counter to match. Say, We started on 5 and moved 2 positions forward. What number are we now on? How many more than 5 is 7 ? How do you know? Repeat for other starting numbers.

## 6. Using the teaching tool to move forward and back

## Resources

- Teaching Tool


## Activity

Ensure that all students can see the Teaching Tool. Point to each of the number tracks and tell the students that their number track is situated at the bottom of the screen, while yours is situated at the top of the screen. Next, drag a hippo above the number 5 on both number tracks. Select a volunteer to click the number cube to make it roll. The student the screen, while yours is situated at the top of the screen. Next, drag a hippo above the number 5 on both number tracks. Select a volunteer to click the number cube to make it roll. The student must then move their hippo in accordance with the direction shown on the cube. It is then your turn. Give other students the opportunity to roll and to predict the numbers the hippos will move to. If a move forward or back is not possible, the player misses a turn. The aim is to finish on the greatest number after five rolls.

## 7. Using materials to act out the story

## Resources

- Hip Hop Hippos
- The Number Case Year K
- Transparent counters


## Preparation

Each pair of students will need a 1 to 10 number track from The Number Case. Each student will need one transparent counter.


## Activity

Read pages 4-5 of Hip Hop Hippos and have the students name the position of each number on the number track. Next, read pages 6-7 of the story and have the students represent the number that the hippo landed on by placing their counter on the corresponding number on the number track. To identify the number that comes just before this number have the students slide the counter one position back, for example from 4 to 3 . To reinforce the students' understanding say, The number 3 comes just before the number 4. Repeat for the remaining pages of Hip Hop Hippos.

## 8. Using the teaching tool to act out the story



## Resources

- Teaching Tool
- Hip Hop Hippos


## Activity

Ensure that all students can see the Teaching Tool. Read pages 6-7 of Hip Hop Hippos. Select a volunteer to act out the scenario by clicking and dragging a hippo to sit above 4 on the number track in the work area. The student should then move the hippo back one to show and then name the number just before 4. Repeat for the remaining double-page
 spreads in the story.

## 9. Using the teaching tool to describe relative position

## Resources

- Teaching Tool
- Support 1 - see attached


## Preparation

Print Support 1 and cut out the relative position cards.

## Activity

Ensure that all students can see the Teaching Tool. Invite a volunteer to click and drag a hippo to place it above a number on the number track in the work area. (Note: Avoid 1 and 10.) Next, have the student find and read aloud the relative position card that describes the position of their number on the track. Repeat with several students.


## IO. Identifying numerals I to IO

## Resources

- Support 2 - see attached
- Scissors


## Preparation

Print one copy of Support 2 for each pair of students and have them cut out the cards.

## Activity

Have the students work in pairs to place the numeral cards facedown in their correct order. Next, have one student in each pair say a number between 1 and 10. The other student must then turn over the matching numeral card. The pair then change roles and repeat several times. To extend the activity, challenge the students to reveal the numeral card that is before or after a nominated number.

The number 2 is just after 1 , just before 3, and between 1 and 3 .

The number 4 is just after 3, just before 5 , and between 3 and 5.

The number 6 is just after 5, just before 7, and between 5 and 7 .

The number 8 is just after 7 , just before 9, and between 7 and 9 .

The number 3 is just after 2, just before 4 , and between 2 and 4 .

The number 5 is just after 4 , just before 6, and between 4 and 6 .

The number 7 is just after 6 , just before 8 , and between 6 and 8 .

The number 9 is just after 8, just before 10, and between 8 and 10 .

Numeral Cards (I-IO)



