

NUMBERS 1–20

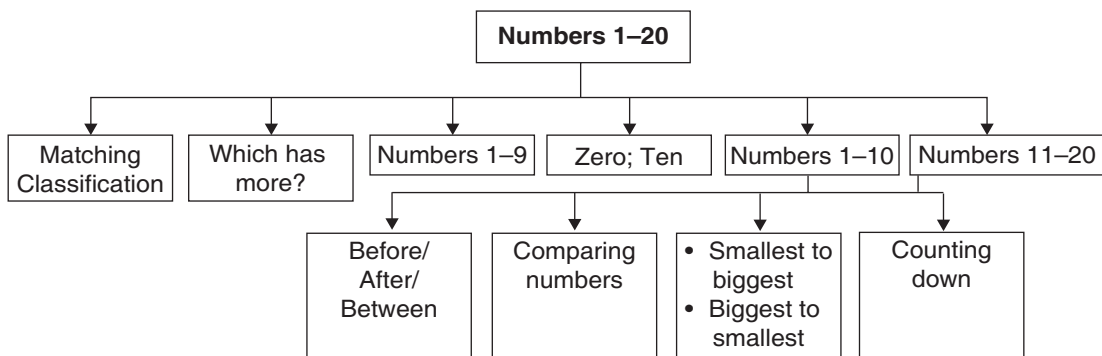
Learning objectives

Students will be able:

- To classify objects in different ways such as by size, colour and shape, and properties such as rolling and sliding.
- To recite number names and count pictures and objects up to 20.
- To write numbers and their number names up to 20.
- To say what comes before, after and in between numbers.
- To compare two numbers and say which is greater/smaller.
- To arrange numbers in increasing and decreasing order.
- To recognise 0 as representing no objects.

Prior knowledge

- Matching objects with similar numbers
- Pre-number concepts (on, under, big, small, more, less...)
- Tracing the given shapes



Guidelines to teach

Rewind:

Matching

- Assist students to complete the rewind exercise on matching.



Warm Up:

Classification

- Help students to identify similar objects (objects with same shape, same size, same colour, objects that roll and slide).

Which has more?

- Place few objects (less than 10 objects) on two tables.
- Ask students to count the numbers of objects on each table and say which table has more objects.
- Guide students to tick the group that has more objects and cross the one that have less objects in the course book.

Numbers 1–9:

- Instruct students to repeat the numbers after you.

- Ask them to trace the numbers given in the course book after they repeat the numbers a few times.

1. Extension activity for counting numbers 1–9:



- Bring a bag of candies/grapes/green peas to the class. Or, ask each student in the class to bring 100 grams of grapes/green peas/candies. (Avoid using marbles/buttons/counters as students might swallow them accidentally.)
 - Distribute 9 candies/grapes/green peas to each student.
 - Instruct them to count the items twice or thrice, if need be, to make them familiar with the counting of real-life objects.
 - Then, instruct them to put the items together as a collection.
 - Call out a number, for example, 4.
 - Ask students to count and remove 4 items from the collection and make a smaller collection of these 4 items.
 - Go round the class and check if students have followed your instructions and done the task correctly.
 - Ask students to put the removed items back into the collection.
 - Continue the activity with different numbers till they are familiar with counting from 1–9.
- Make two sets of flashcards. On one set of cards, write the numerals 1–9, one numeral per card. On the other set, draw the corresponding number of things for each numeral. Ask students to match the cards in the two sets to help them establish the connection between the numeral and the number.

Zero:

- Arrange a few objects on the table.
- Keep removing the objects one by one.
- Ask students to count the objects remaining on the table, along with you, each time you remove an object.
- Give a dramatic pause after removing the last object and ask them to count the objects on the table.
- Elicit from students that there are no objects.
- Tell them that there are **zero** objects on the table.
- Write on the board, *Nothing* and *0* next to it.
- Tell students zero is also a number and it means nothing/none.
- Let them trace the number 0 given in the course book.
- Demonstrate the Activity given in the course book to reinforce the value of zero.

2. Extension activity for zero:



- Make a few cards with 0 written on them.
- Take a few cups or pencil boxes and arrange them on the table in a line. Place a few items in some of the cups/boxes. Leave the other cups/boxes empty.
- Call students in groups and ask them to place the 0 card in front of the correct bowls.
- Check if students place the cards in front of the bowls that are empty.
- Correct students who have not been able to follow instructions and get it right the first time.
- Ask them to repeat the activity.

Ten:

- Introduce the number 10 as shown in the course book.

Numbers 1–10:

- Guide students to complete the Tryout and the Activity for numbers 1–10 given in the course book.

Before/After/Between:

- Ask 10 students to come to the front of the class.
- Help them stand in a line (queue) one after another.
- Tell the class:
(Use the names of your students.)
 - Meera is standing **before** Anirudh.
 - Anirudh is standing **after** Meera.
 - Zohaib is standing **after** Anirudh.
 - Anirudh is standing **between** Meera and Zohaib.
- In each of the above statements, lay stress on the words before, after and between.
- Repeat the statements with before/after/between using the names of the other students standing in the line.
- Ask the class to repeat the sentences after you.

3. Extension activity for Before/After/Between numbers:



- Ask 10 students to come to the front of the class and stand in a line. (You may retain the same set of 10 students that you chose for the previous demonstration or choose a different set for this activity).
- Hand over cards with numbers 1–10 in random order to these students.

- Ask them to rearrange themselves in a line as per the correct order of the numbers.
- Instruct students to hold their cards high.
- Now, ask another student to join the line and stand before the first student.
- Ask the class to guess the number card to be given to this student.
- Elicit the number 0 from them. Give the student the card with 0.
- Ask the class questions like:
 - What number comes before 2?
 - What number comes after 7?
 - What is the number between 8 and 10?
 - What comes before 1?
- Ensure that every student gets a chance to answer, even if you have to repeat the questions several times.

- Instruct students to complete the Tryout for Before/After/Between numbers using the number strip given in the course book.

Bigger and smaller (comparing numbers):

- Use different sets of items, like a set of pencils, a set of erasers and so on to teach this concept.
- Divide each set of items into two groups, one bigger and one smaller. For example, if you have a set of 10 erasers, divide them into two groups of 6 erasers and 4 erasers and place them apart on the table.
- Ask students to count the items in each group along with you and say which group has more and which has less.
- Make groups of different combinations like 8 and 2, 7 and 3 and so on.
- Write the numbers on the board each time and ask students to tell you the sign (</>) to be put between the numbers.
- Read out what you have written on the board as statements. For example:
 - $6 > 4$ 6 is bigger than 4.
 - $4 < 6$ 4 is smaller than 6.
- Instruct students to complete the Tryout and the Activity on finding the bigger and smaller number given in the course book.

Numbers 11–20:

- Follow the guidelines and use the Activity given in the course book to teach numbers 11–20.

Writing 11–20:

- Guide students to complete the Tryout for writing numbers 11–20 given in the course book.

Before, after, between

- Using the number strip given in the course book, help students complete the Tryout.

Comparing numbers, smallest to biggest, biggest to smallest:

- Follow the guidelines and use the same activities given for comparing numbers 1–10 to teach comparison of numbers 11–20.
- Use the course book to explain how numbers are arranged from smallest to biggest and from biggest to smallest
- Using the illustrations of sets of pencils given in the course book, help students conclude that more items denote a bigger number and less items denote a smaller number
- Instruct the students to complete the Tryouts on comparing numbers.

Counting down:

- Instruct students to say the numbers from 10–0 a few times before moving on to the numbers 20–11. (You may ask students to do this in groups.)
- Finally, ask students to say the numbers from 20–0.
- Explain the concept of counting down using the illustration (of a child climbing down the staircase) given in the course book before they attempt the Tryout.

4. Extension activity for counting down:



- Call 21 students to the front of the class and make them stand in a row facing the class.
- Show the class the two ends of the row.
- Ask the student at one end of the row to say the number 0 loudly.
- Ask the next student to say the number 1, the third student to say the number 2 and so on, till all the numbers up to 20 have been said.
- Tell students that the number they have said is their number and that they have to remember it.
- Ask students to say their numbers again, this time starting from the other end. (That is, the student who said 20, starts first, followed by the students who said 19, 18, 17 and so on, till all the numbers up to 0 have been said.)
- Finally, ask the rest of the class to join these students in counting down from 20 to 0.

You may even make this a whole-class activity without asking the children to come to the front.

More suggestions for extension activities:

5. Activity (Numbers 1–10):



- Ask each student to bring a few paper cups and 10 candies or chocolates to the class. (On the previous day, remember to inform students to bring the items to the class.)

- Collect the cups and chocolates from them.
- Count all the chocolates and divide them into sets of 55 chocolates each. Divide the class into as many groups as the sets of 55 chocolates with you. (That is, suppose you can make 4 sets of 55 chocolates each, divide the class into 4 groups.)
- Give 11 cups and 55 chocolates to each group. Ask them to number the cups 0–10.
- Ask the groups to look at the number on each cup and put the matching number of chocolates into each cup.
- Remind them to count out loud as they put the chocolates into the cups.
- Check the 0 cup of all the groups. Do a random check of the other cups.
- You may extend the activity for numbers 1–20 by using more cups and chocolates.

6. Activity (Smallest to biggest/Biggest to smallest):

- Bring 21 paper cups to the class.
- Write the numbers 0 through 20 on the cups, one number per cup.
- Mix up the cups and give them to a group.
- Ask the group to arrange the cups in order from the smallest to biggest and from biggest to smallest numbers.

7. Activity (Before/After/Between):

- Draw on the board a table with 21 columns. Or, use a sheet of white chart paper to make sufficient number of number strips with 20 divisions.

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- Give each student a strip or ask them to copy what you have drawn on the board, in their notebook.
- Call out the numbers (starting from 0) at random and instruct students to write the numbers inside the correct squares.
- Once they have filled the strip with 0–20, ask them to use the same grid for the next task. Instruct them to have a set of crayons (12 colours) ready.
- Give them the following set of instructions:
 - Colour the number between 5 and 7 red
 - Colour the number before 1 blue
 - Colour the number after 19 black.
 - Colour the number between 10 and 12 green.
 - Colour the number before 5 orange.
- Encourage peer or self-assessment.

Question Bank

Answer the following questions.

(1) BUILDING NUMBERS 11 TO 20.

- (a) How many tens and ones make 13?
- (b) How many tens and ones make 20?
- (c) If I have one ten and six ones, what number will I get?

(2) NUMBER NAMES 1 TO 20.

- (a) Write the number names.
 - (i) 17 (ii) 8
- (b) Write the numerals.
 - (i) eight (ii) nineteen

(3) ORDERING OF NUMBERS.

- (a) What comes after 1?
- (b) What comes after 8?
- (c) What comes between 14 and 16?

(4) COMPARING NUMBERS.

- (a) Which number is bigger—4 or 7?

- (b) Which number is smaller—18 or 16?

- (c) Which is the biggest of these numbers—7, 8, 6 and 4?

- (d) Which is the smallest of these numbers—12, 10 and 15?

(5) THE SMALLEST TO THE BIGGEST AND THE BIGGEST TO THE SMALLEST.

- (a) Write these numbers from the smallest to the biggest.

- (i) 4, 9, 2, 0
- (ii) 18, 12, 16
- (iii) 10, 7, 6, 13

- (b) Write these numbers from the biggest to the smallest.

- (i) 3, 5, 9
- (ii) 18, 8, 20
- (iii) 11, 17, 7, 16

Answer Key to the Question Bank

- (1) (a) One ten and 3 ones (b) Two tens and 0 ones (c) 16 (2) (a) (i) Seventeen (ii) Eight
(b) (i) 8 (ii) 19 (3) (a) 2 (b) 9 (c) 15 (4) (a) 7 (b) 16 (c) 8 (d) 10 (5) (a) (i) 0, 2, 4, 9
(ii) 12, 16, 18 (iii) 6, 7, 10, 13 (b) (i) 9, 5, 3 (ii) 20, 18, 8 (iii) 17, 16, 11, 7

Answer Key—Numbers 1–20

Worksheet 1

- A.** 1. 8 children 2. 10 balloons 3. 6 gifts 4. 8 candles 5. 5 cards 6. 2 caps 7. 1 cake
8. 7 glasses **B.** 1. Eleven 2. Nineteen 3. Eight **C.** 1. 3 2. 19 **D.** 1. 18, 17, 16, 14, 13
2. 8, 9, 10, 11 3. 10, 9, 8, 7, 6

Answer Key—Numbers 1–20

Worksheet 2

- A.** 1. 6 ducks and ducklings 2. 5 cows and calves 3. 3 goats 4. 5 mangoes 5. 8 cats
and kittens 6. 3 boys 7. 1 girl 8. 9 tomatoes **B.** 1. 20, 17, 9, 7, 4 2. 3, 6, 7, 10, 14
C. 1. 10, 11, 12, 14 2. 16, 15, 14, 13 3. 4, 6, 7



A. Look at the picture and answer the questions.

How many?

1. Children
2. Balloons
3. Gifts
4. Candles
5. Birthday cards
6. Caps
7. Cakes
8. Glasses



B. Fill in the missing letters.

1. E ____ e ____ e n.
2. N i ____ e ____ ____ n.
3. ____ i ____ ____ t

C. Answer the questions.

1. Circle the smallest number: 19, 7, 3, 10
2. Circle the biggest number: 6, 14, 11, 19

D. Fill in the blanks.

1. 19, _____, _____, _____, 15, _____, _____, 12
2. 6, 7, _____, _____, _____, _____, 12
3. 12, 11, _____, _____, _____, _____, _____, 5



A. Answer the question.

How many?

1. Ducks and ducklings
2. Cows and calves
3. Goats
4. Mangoes
5. Cats and kittens
6. Boys
7. Girls
8. Tomatoes



B. Answer the questions.

1. Arrange 9, 20, 7, 4, and 17 from the biggest to the smallest.

2. Arrange 7, 3, 10, 14, and 6 from the smallest to the biggest.

C. Fill in the blanks.

1. 9, _____, _____, _____, 13, _____, 15
2. 18, 17, _____, _____, _____, _____, 12
3. 2, 3, _____, 5, _____, _____, 8