



G3.14 | RECOGNIZE ODD AND EVEN NUMBER PATTERNS

Number Sense Concepts - NCERT Chapter 10: Play with Patterns

Students will be able to recognize patterns formed by odd and even numbers

40- 50 min

PRE REQUISITES:

G2.06 Know skip counting in 2s, 5s and 10s

TLM

None

MISCONCEPTIONS

Students tend to think of odd & even as attributes of numerals & do not conceptually understand even & odd numbers

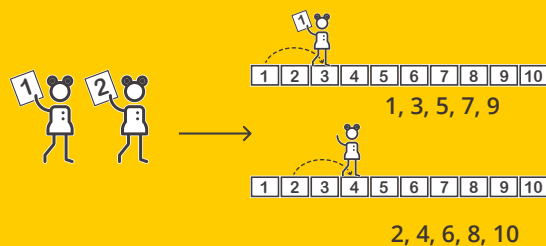


KEY VOCABULARY

Odd, Even



PLAY



Understanding that odd and even numbers using a number line

○ Draw two number lines on the floor. Start the number lines from 0 and continue up to 30

○ Ask one student to start from 1 & the other to start from 2. Tell them to skip count by 2s & call out the no.s they hop on

○ Keep a record of the numbers each student hops on the blackboard

QUESTION: Student 1 hopped on no.s 1, 3, 5, 7, 9, 11, 13, 15, 17, which will the next no. to be hopped on?

○ How do you know?

QUESTION

Student 2 hopped on no.s 2, 4, 6, 8, 10, 12, 14, 16, 18, which will be the next no. to be hopped on? How do you know?

QUESTION

Can you observe any pattern in the last digits of the numbers in each sequence? What is the pattern?



PROCESS

Even All in pair	Odd Not all in pair
0	1 •
2 ••	3 •••
4 ••••	5 •••••
6 ••••••	7 •••••••
8 ••••••••	9 •••••••••

Odd and even numbers

○ Write number 1 to 9 on the blackboard and show the corresponding number of circles next to each number

○ Pair the circles as shown. Tell that even no. of objects are those that can be paired & odd no. of objects can't be paired

○ Point to numbers 2, 4, 6, and 8 and tell that 2, 4, 6, and 8 objects can be paired together perfectly

○ Point out that no circle is left unpaired for any of these numbers

○ Point to no.s 3, 5, 7, and 9 & tell that 3, 5, 7, or 9 objects can't be perfectly paired. One object is always left unpaired

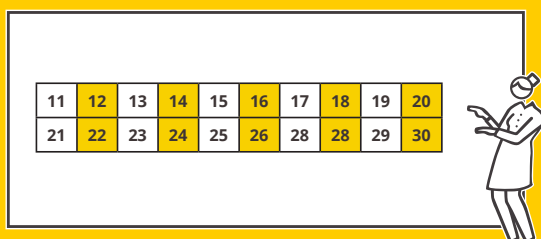
○ Tell the students that they can identify a number as odd or even by looking at their last digit

○ Explain that odd numbers always end with either 1, 3, 5, 7, or 9 while even no.s always end with 2, 4, 6, 8, or 0

○ Tell that every alternate no. is even when starting from 2 & every odd when starting from 1



PRACTICE



Write the question on the blackboard and ask the students to solve

○ Help the students solve question 2 from the worksheet. Ask the students to shade all even numbers

11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

○ Help the students solve question 4 from the worksheet. Ask the students to check if number 22 is odd or even

○ Explain that 22 is even because the last digit of 22 is 2. Draw 22 circles and pair them to show that no circle is left unpaired

QUESTION

Which is the smallest odd number?

- ① SOLVED EXAMPLE : Start from 41 and mark all the odd numbers upto number 79

41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

- ② Start with 12 and mark all the even numbers upto number 50

11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- ③ Use the given digits to make a 2-digit even and a 2-digit odd number

Digits	Odd number	2 digit even number
1, 3, 4, 0	43	10
1, 2, 3, 4		
3, 4, 5, 6		
5, 6, 7, 0		
9, 7, 8, 1		

- ④ Is it possible to make perfect pairs of 22 objects? Draw circles and show that no circle is left unpaired.

- ⑤ Complete these sequences

- a. 31, 33, 35, _____, _____,
- b. 12, 14, 16, _____, _____,
- c. 92, 90, 88, _____, _____,

⑥ Many things that we use in our daily lives come in pairs. E.g. socks, shoes, ear-rings etc. Write any five such examples.

