The Mayan Number System (5th and 6th Class)

Resources: Mayan number chart on activity template

Strands: Place value

Activity: This activity explores the Mayan number system which used a combination of base 5 and base 20. We use a base 10 system. Show pupils the Mayan number chart on the activity template and explore how the numbers are represented. Use the questions below to explore in greater depth.

Questions: How would you represent the number 51?

How would you represent the number 76?

What are the possible ways of representing 100?

Challenge Questions:

- How could you write the sum 21 + 14 using the Mayan number system? What would the answer look like in the Mayan system?

- Select two numbers and subtract the smaller number from the larger number using the Mayan number system.

Variations:

1. Think about place value in another base system—what would the number ten be if using a base four system? (4, 4, 2 = 22)

2. How about the number ten in a base eight system? (8, 2 = 12)

For more info visit mathsweek.ie

The Mayan Number System

- ● A dot represents the number 1
- ▬ A stick represents the number 5
- 👁 A shell represents the number 0

1 ●	2 ●●	3 ●●●	4 ●●●●	5 ▬
6 ●▬	7 ●●▬	8 ●●●▬	9 ●●●●▬	10 ▬▬
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 ●●/▬▬