## Number Base Clocks Exploration Questions

1. Using the activity, select 3 number bases other than base 10 and fill in the chart counting from 1-20 in your selected base number system. Make sure that the box labeled "Number Clocks in Base 10" is not selected for this.

| Base 10 | Base | Base | Base |
| :--- | :--- | :--- | :--- |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |
| 13 |  |  |  |
| 14 |  |  |  |
| 15 |  |  |  |
| 16 |  |  |  |
| 17 |  |  |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |

2. Examine the chart. What similarities do you notice between the numbers represented in base 10 and the numbers represented in other bases?
3. What is the number 342 in base 6 written as in base 10 ? Explain your thinking.
4. Explain why numbers in lower bases have more digits. Suport your answer with an example.
