
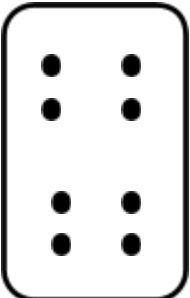
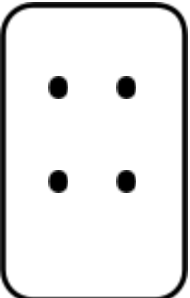
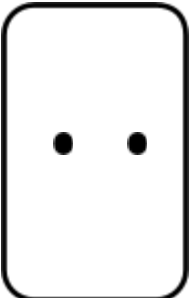
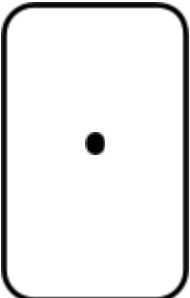


Name: **Answer Key**

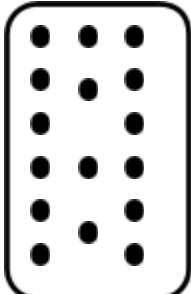
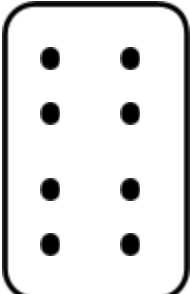
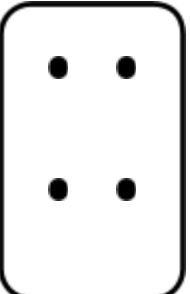
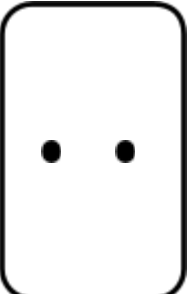
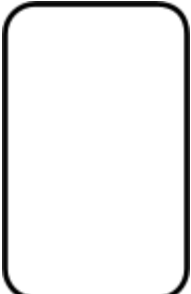
## Binary Numbers by Hand

1. What is the largest number we can create using our cards (count the total number of dots across each card)? **31**

2. What is the binary sequence for the number 15?

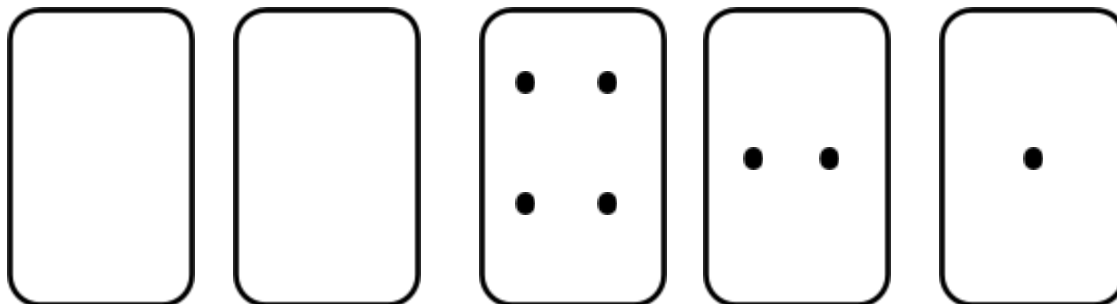
0	1	1	1	1
				

3. What is the binary sequence for the number 30?

1	1	1	1	0
				

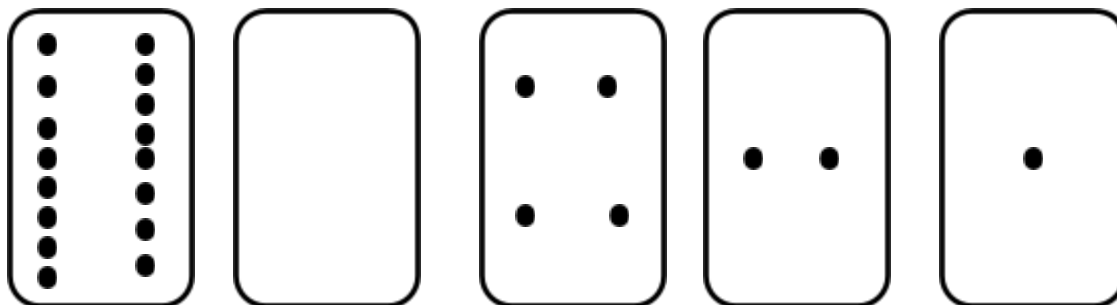
4. What is the binary sequence for the number 7?

0	0	1	1	1
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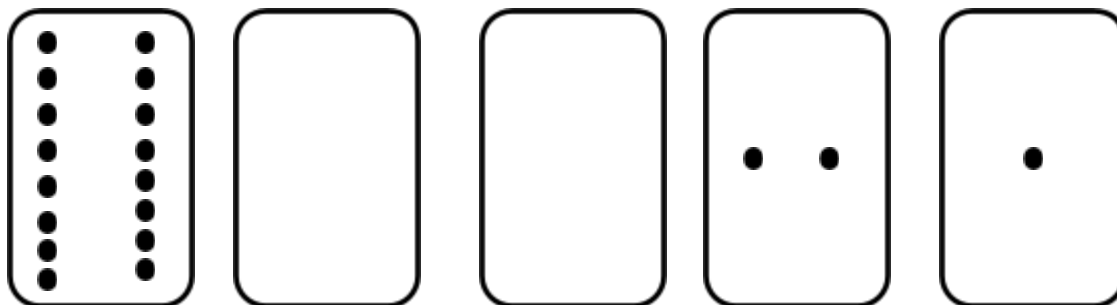
5. What is the binary sequence for the number 23?

1	0	1	1	1
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6. What is the binary sequence for the number 19?

1	0	0	1	1
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Idea from: <https://www.csunplugged.org/en/at-home/binary-challenge/challenges/>

7. If we made 6 cards instead of 5, how many dots would be on the 6th card (try to see the pattern between each card)? **32**