

THE NUMBERS SHOW

starring

ZERO and The Digits

Episode 3 Learning Guide

Special Guest: 8

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1. What does it mean to eat a light snack?
2. What digits are in the binary number system? Why would that mean 0 shares it with 1?
3. Why was 0 never full at dinner?
4. Why would people stop and look both ways when they see 8?
5. How many mints are in the After 8 Dinner Mints commercial?
6. Why does 8 have a stop sign?
7. What shape is a stop sign?
8. What is the hat that 8 is wearing called?
9. How many legs does a spider have?
10. What do you call words that are spelled alike but pronounced differently? Name another pair of words that are spelled the same but pronounced differently.
11. What do you call words that are spelled differently but pronounced the same? Do you remember the answer from the game in episode 1?
12. Can you list words that look and sound the same as rain? CHALLENGE: Can you list words that look and sound the same as again?
13. Which nursery rhyme is older, "The Itsy Bitsy Spider" or "Little Miss Muffet"?
14. 8 and 0 mention both milky whey and the Milky Way. Is the picture shown of milky whey or the Milky Way?
15. We live on Earth, a planet in a solar system within the Milky Way galaxy. How many planets are in our solar system?
16. What does elliptical mean? Draw an elliptical shape. What's the difference between an elliptical shape and an oval shape?

17. How many places in the world can you list that you can find an 8 or 8 of something? For example, a stop sign has 8 sides.
18. Why is an octopus called an octopus?
19. Do octopi have arms or legs? Or are they called tentacles?
20. What is the reasoning that 007 thinks an octopus who loses one arm/leg/tentacle should be called a septapus?
21. What is the reasoning that 2-Love thinks an octopus with only 7 arms/legs/tentacles should still be called an octopus?
22. Can you name any other animal that regrows its legs or arms?
23. What is an arachnid?
24. Why is the plumbing company called Itsy Bitsy Spider Plumbing?
25. Why might 8 like the phone number for the phone company?
26. What is a "double point handicap?" Is it fair for 0 to get a handicap in the game? Why or why not?
27. Who would have won the game if 0 did not have a handicap?
28. Compare the number of letters of words completed by 0 versus the spider. If the number of letters were the method to determine who won the game, who would have won?
 - a: **without** a double handicap
 - b: **with** a double handicap
29. What is a cephalopod?
30. What is a mews?
31. What is the thinking that the octopus teaches that size does not matter when losing a leg/arm/tentacle?
32. Why did China open the Olympics at 08:08:08 on 08/08/08?
33. Challenging: What does the Pope Gregory change in the calendar have to do with 8? (Hint: What month was October before the change was made and what is it now after the change?)
34. What continent is Scotland on?
35. Who is Macbeth?
36. Why do you think bagpipes would be banned in Scotland?
37. Can you think of another instrument that has 8 parts?
38. Challenging: What country/area of the world is the phrase "prosperity and fortune" referring to?

Content Link of Discussion Questions to Disciplines

Discussion Question	Language	Math Thinking	Critical Thinking	ELL	Science	Art	Geography	Culture	History
1	x								
2		x							
3			x						
4			x		x			x	
5		x							
6		x	x						
7		x							
8								x	
9		x			x				
10	x			x					
11	x			x					
12	x								
13								x	x
14	x		x		x				
15					x				
16		x	x			x			
17		x	x				x	x	
18	x	x	x						
19	x				x				
20	x	x	x						
21	x				x				
22					x				
23					x				
24	x	x	x					x	
25		x	x						
26			x					x	
27		x							
28		x	x						
29					x				
30	x							x	
31		x	x						
32			x				x	x	x
33		x	x					x	x
34							x		
35	x							x	
36			x				x	x	x
37		x	x			x		x	
38	x						x	x	