

# Bowl-A-Fact

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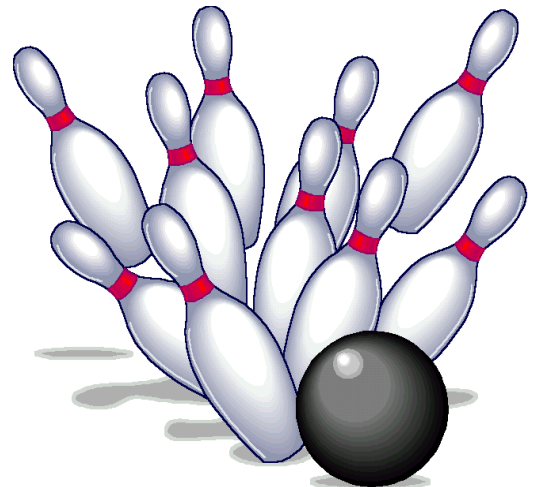
2

3

1

**Roll #1**

**Roll #2**



# Bowl-A-Fact



- 1) Start by rolling three dice. This is your first “throw” down the lane.
- 2) The students must use all three and only those three numbers rolled to try to knock down as many “pins” as possible. To knock down a pin, the pin number needs to be the answer to the problem the students create. I put the pin sheet on the Smartboard and as we knock down the pins, we cross them out.
- 3) To knock down a pin students can add, subtract, multiply, divide, use fractions, exponents, etc. BUT again they must use all 3 and only those 3, so you can’t have  $3^2$  unless you rolled both a 3 and a 2.
- 4) Goal: to persevere and create the different totals and to work together as a class “to try to get a strike.”
- 5) After a few minutes of work time, students can come up to board and share their work for a pin that they knocked down. Students will discuss if they agree with the work and if they “knocked” down that pin a different way. (Often as they are working, they will say aloud, “I got the 4 pin.” Or “I can’t get 8, did anyone get the 8?” etc. I encourage this type of talk. I often work on it too and will tell them if I got a number they need, but I don’t tell them how. Since all totals are not possible with three numbers I don’t want them to try forever to get something they can’t get, but I also don’t want them giving up with something can be knocked down. **They need to work on perseverance-showing GRIT!**)
- 6) If we don’t get a strike, we throw again looking for the spare. A throw is rolling the three dice. Now, we only have to try to get the pins that are still standing. If we knocked down the five on our first roll, we don’t have to get that answer again.

EXAMPLE

**Roll #1**

**4 - 2 - 3**

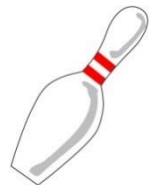
**Possible work:**

$3^2 - 4 = 9 - 4 = 5$ , knocked down the 5 pin

$24 \div 3 = 8$ , knocked down the 8 pin

$4 + 3 + 2 = 9$ , knock down 9

$4 - 3 + 2 = 3$ , got the three



Great for working on order of operations. Often students get a pin, but without ( ) it might not be correct, so we work on that.