Momentum webquest day 2

Go to the following link to complete the rest of the web quest: <http://www.physicsclassroom.com/Physics-Interactives/Momentum-and-Collisions>

Click on the fish catch interactive. Click Launch Interactive. Begin activity. Record the data from the interactive below for 4 different collisions.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Before Crash | | After Crash | |
|  | Mass (g) | Velocity | Momentum | Velocity | Momentum |
| Big fish |  |  |  |  |  |
| Little fish |  |  |  |  |  |
| Total |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Before Crash | | After Crash | |
|  | Mass (g) | Velocity | Momentum | Velocity | Momentum |
| Big fish |  |  |  |  |  |
| Little fish |  |  |  |  |  |
| Total |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Before Crash | | After Crash | |
|  | Mass (g) | Velocity | Momentum | Velocity | Momentum |
| Big fish |  |  |  |  |  |
| Little fish |  |  |  |  |  |
| Total |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Before Crash | | After Crash | |
|  | Mass (g) | Velocity | Momentum | Velocity | Momentum |
| Big fish |  |  |  |  |  |
| Little fish |  |  |  |  |  |
| Total |  |  |  |  |  |

1. What is the equation for momentum?
2. What pattern do you observe with the total momentum before and after the launch?

1. How does the size of the small fish influence the velocity of the big fish?
2. How does the total mass (small + big fish) influence the momentum of the fish together?
3. Why? Think about the equation for momentum. Explain your answer from #4