OUR FUN AND EASY SCIENCE FAIR PROJECT

Per: \_3\_­\_ Names: \_\_\_\_Please write first and last names of everyone in your group\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- |
|  | Possible points | Points earned | Complete answers below |
| **Our observation** | 5 | 5 | I am learning how to play golf and would like to use the kind of golf ball that will travel the farthest. |
| **Our question** | 5 | 5 | What brand and type of golf ball travels the farthest? |
| **Our (pretend) research**  **Use additional paper if needed** | 10 | 10 | There are two types of balls, multilayer and two-piece. Multilayer balls have multiple layers so they usually provide the best all-around play, but they tend to be more expensive. All the balls I am testing are multilayer balls. Two-piece balls are made of a single core and are made for distance. Most golf ball cores are made out of rubber like the Titleist Pro V1 and the Callaway Hex Black balls. However, the Nike 20XI golf ball utilizes a resin core and claims that it changes the weight structure to create a higher moment of inertia, which is the energy released by the impact of the golf club. The amount and shape of the dimples on a golf ball causes lift from air resistance. |
| **Our hypothesis** | 5 | 5 | I think the Titleist Pro V1 golf ball will travel the furthest because it is the number one selling ball in golf. |
| **Our (pretend) experiment materials** | 10 | 10 | Callaway Hex Black balls (6), Titleist ProV1 balls (6), Nike 20XI balls (6) TrackMan golf ball launch device  Ping G20 Driver golf club  Golf course driving range  Measuring tape |
| **Our (pretend) controlled experiment procedure** | 20 | 20 | 1. Build or borrow a golf ball launch device that hits every golf ball exactly the same. 2. Use the device to hit each of the golf ball 3 times 3. Measure where the golf ball lands on the ground 4. Record all data |
| Independent variable (want to test) | 5 | 5 | Callaway Hex Black balls, Titleist ProV1 balls, Nike 20XI balls |
| Dependent variable (the factor measured) | 5 | 5 | The average of the distance that the golf balls traveled |
| The constants | 10 | 10 | The driving range grass  The launching device  The golf club |
| Data results and graphs | 15 | 15 | **Show the class your (pretend) data results on**  **large construction paper or graph paper** |
| **Conclusion** | 5 | 5 | The Nike 20XI went the furthest by only 0.1 yard and it was the only golf ball of the three that had a resin core. This could have made more energy release when the club came in impact with the ball, thus making it fly farther than the others. My hypothesis was incorrect. |
| **Communicated results** | 5 | 5 | Everyone in my group participated in the experiment and shared results with my classmates. |

**TOTAL: 100 A+**