Name _____ Date _____

6.2 Puzzle Time
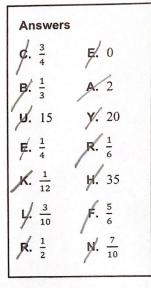
Who Kept Tom Sawyer Cool In The Summertime?

Write the letter of each answer in the box containing the exercise number.

You randomly pick a nut from a can of mixed nuts 20 times and record the results: 5 almonds, 6 peanuts, 2 hazelnuts, 3 pecans, and 4 cashews. Find the experimental probability of the event.

1. choosing an almond $\frac{5}{20} = 25\%$ 2. choosing a peanut $\frac{6}{20} = \frac{3}{10}$

3. choosing a peanut or cashew   4. choosing not an almond $\frac{15}{20} = \frac{3}{4}$
   $\frac{10}{20} = \frac{1}{2}$

5. choosing not a peanut   6. choosing a walnut 0
   $\frac{14}{20} = \frac{7}{10}$

You pour 50 nuts into a bowl. Use the results from the example above to make the following predictions.

$\frac{6}{20} = \frac{x}{50}$

7. How many peanuts would you expect to be in the bowl? 15

$\frac{8}{20} = \frac{x}{50}$

8. How many almonds and pecans would you expect to be in the bowl? 20

$\frac{14}{20} = \frac{x}{50}$

9. How many nuts that are *not* a peanut would you expect to be in the bowl? 35

You and your friends decide to play hide-and-seek. In a plastic container, there are 2 blue flashlights, 4 green flashlights, 1 red flashlight, 3 white flashlights, and 2 black flashlights. Find the theoretical probability of the event.

10. choosing a green flashlight $\frac{4}{12} = \frac{1}{3}$ 11. choosing a black flashlight $\frac{2}{12} = \frac{1}{6}$

12. choosing a red flashlight $\frac{1}{12}$ 13. choosing a flashlight that is not blue $\frac{10}{12} = \frac{5}{6}$

14. The theoretical probability of choosing a green marble is $\frac{1}{3}$. If there are 6 marbles in the bag, how many marbles would you expect to be green?

$\frac{1 \cdot 2}{3 \cdot 2} = \frac{2}{6}$ ←total marbles 2

Answers

C. $\frac{3}{4}$ E. 0

B. $\frac{1}{3}$ A. 2

U. 15   Y. 20

E. $\frac{1}{4}$ R. $\frac{1}{6}$

K. $\frac{1}{12}$ H. 35

L. $\frac{3}{10}$ F. $\frac{5}{6}$

R. $\frac{1}{2}$ N. $\frac{7}{10}$

9	7	4	12	2	6	10	1	11	3	8		13	14	5
H	U	C	K	L	E	B	E	R	R	Y		F	A	N