Student Name: _____ **Score:**

Probability Worksheet

A month is chosen from a year.

Problems	Work Space
Find the probability of selecting March. Answer: _____	
Find the probability of choosing a month starts in M. Answer: _____	
Find the probability of selecting a month starts in either M or J. Answer: _____	
Find the probability of selecting a month starts in A. Answer: _____	
Find the probability of selecting a month with 30 days. Answer: _____	

Student Name: _____ **Score:**

Answers

Find the probability of selecting March. Answer: $\frac{1}{12}$	
Find the probability of choosing a month starts in M. Answer: $\frac{1}{6}$	
Find the probability of selecting a month starts in either M or J. Answer: $\frac{5}{12}$	
Find the probability of selecting a month starts in A. Answer: $\frac{1}{6}$	
Find the probability of selecting a month with 30 days. Answer: $\frac{1}{3}$	

Student Name: _____ **Score:**

Probability Worksheet

There are 25 students in grade 5. 15 are boys and rest of them are girls. A student is selected for a field trip in random. Find the

Problems	Work Space
Probability of selecting a boy Answer: _____	
Probability of selecting a girl Answer: _____	
Odds in favor of boy Answer: _____	
Odds in favor of girl Answer: _____	
Odds against boy and odds in favor of girl are same. Is that right? Answer: _____	

Student Name: _____ **Score:**

Answers

Probability of selecting a boy Answer: $\frac{3}{5}$	
Probability of selecting a girl Answer: $\frac{2}{5}$	
Odds in favor of boy Answer: $3:2$	
Odds in favor of girl Answer: $2:3$	
Odds against boy and odds in favor of girl are same. Is that right? Answer: yes	

Student Name: _____ **Score:**

Deck of Cards Worksheet

A card is drawn from single deck of 52 cards.

Problems	Work Space
Find the probability of drawing black king. Answer: _____	
Find the probability of drawing white queen. Answer: _____	
Find the probability of drawing club. Answer: _____	
Find the probability of drawing heart. Answer: _____	
Find the probability of drawing spade or diamond. Answer: _____	

Student Name: _____ **Score:**

Answers

Find the probability of drawing black king. Answer: $\frac{1}{26}$	
Find the probability of drawing white queen. Answer: 0	
Find the probability of drawing club. Answer: $\frac{1}{4}$	
Find the probability of drawing heart. Answer: $\frac{1}{4}$	
Find the probability of drawing spade or diamond. Answer: $\frac{1}{2}$	

Student Name: _____ **Score:**

Independent and Dependent

10 cards are numbered from 1 through 10. Cards are well shuffled and the cards are drawn at random.

Problems	Work Space
Three cards are drawn without replacement. First and the second cards show 4 and 6 respectively. Find the probability of selecting an even number in a third draw. Answer: _____	
If the conditions are same as in question 1, find the probability of selecting an odd number in a third draw. Answer: _____	
If two cards are drawn with replacement, find the probability of choosing prime number in both first and second draw. Answer: _____	
If two cards are drawn without replacement, find the probability of drawing 4 or 5 in a first draw and any even prime in a second draw Answer: _____	

Student Name: _____ **Score:**

Answers

Three cards are drawn without replacement. First and the second cards show 4 and 6 respectively. Find the probability of selecting an even number in a third draw. Answer: $\frac{3}{8}$	
If the conditions are same as in question 1, find the probability of selecting an odd number in a third draw. Answer: $\frac{5}{8}$	
If two cards are drawn with replacement, find the probability of choosing prime number in both first and second draw. Answer: $\frac{4}{10} * \frac{3}{9} = \frac{2}{15}$	
If two cards are drawn without replacement, find the probability of drawing 4 or 5 in a first draw and any even prime in a second draw Answer: $\frac{2}{10} * \frac{1}{9} = \frac{1}{45}$	

Student Name: _____ **Score:**

Independent and Dependent

A box contains 2 red marble, 3 white marble, 4 green marbles and 1 blue marble. Two marbles are drawn at random without replacement. Find the probability of

Problems	Work Space
Selecting a green marble in a second draw if the first marble is blue. Answer: _____	
Selecting a white marble in a first draw and red marble in a second draw. Answer: _____	
Selecting red marbles in both draws. Answer: _____	
Selecting red or white in a first draw and green or blue in second draw. Answer: _____	
Selecting white marble in a first draw and white or blue in a second draw. Answer: _____	

Student Name: _____ **Score:**

Answers

Selecting a green marble in a second draw if the first marble is blue. Answer: $\frac{4}{9}$	
Selecting a white marble in a first draw and red marble in a second draw. Answer: $\frac{3}{10} * \frac{2}{9} = \frac{1}{15}$	
Selecting red marbles in both draws. Answer: $\frac{2}{10} * \frac{1}{9} = \frac{1}{45}$	
Selecting red or white in a first draw and green or blue in second draw. Answer: $\frac{5}{10} * \frac{5}{9} = \frac{5}{18}$	
Selecting white marble in a first draw and white or blue in a second draw. Answer: $\frac{3}{10} * \frac{3}{9} = \frac{1}{10}$	

Student Name: _____ **Score:**

Identify the suitable events

Identify more likely, less likely, equally likely, sure and impossible events:

	Answer
Selection of a white ball from a box with 5 white balls, 8 red balls and 10 yellow balls.	
Selection of a black card from a deck of cards	
Occurrence of even number when a die is rolled.	
Selection of red marble from a box with 12 red marbles.	
Selection of red marble from a box with 12 white balls.	
Selecting a boy for a field trip from a group of 35 students with 12 girls.	

Student Name: _____ **Score:**

Identify more likely, less likely, equally likely, sure and impossible events:

	Answer
Selection of a white ball from a box with 5 white balls, 8 red balls and 10 yellow balls.	Less likely
Selection of a black card from a deck of cards	Equally likely
Occurrence of even number when a die is rolled.	Equally likely
Selection of a red marble from a box with 12 red marbles.	Sure event
Selection of a red marble from a box with 12 white balls.	Impossible event
Selecting a boy for a field trip from a group of 35 students with 12 girls.	More likely

Student Name: _____ **Score:**

Balls in a container

Work Space

There are 5 white balls, 8 red balls, 7 yellow balls and 4 green balls in a container. A ball is chosen in random.

What is the probability of choosing red?

Answer:

What is the probability of choosing green?

Answer:

What is the probability of choosing either red or white?

Answer:

What is the probability of choosing neither white nor green?

Answer:

What is the probability of choosing other than yellow?

Answer:

What is the probability of choosing black?

Answer:

Student Name: _____ **Score:**

Answers: Work Space

There are 5 white balls, 8 red balls, 7 yellow balls and 4 green balls in a container. A ball is chosen in random.

What is the probability of choosing red?

Answer: $\frac{1}{3}$

What is the probability of choosing green?

Answer: $\frac{1}{6}$

What is the probability of choosing either red or white?

Answer: $\frac{13}{24}$

What is the probability of choosing neither white nor green?

Answer: $\frac{5}{8}$

What is the probability of choosing a ball other than yellow?

Answer: $\frac{17}{24}$

What is the probability of choosing black?

Answer: **0**

Student Name: _____ **Score:**

Independent and Dependent

Two cards are drawn from single deck of 52 cards one after the other.

Problems	Work Space
Find the probability of selecting a king in a first card. Answer: _____	
Find the probability of selecting a king in a second card if the first card is king and is not replaced. Answer: _____	
Find the probability of selecting a king in a first card and queen in a second card without replacing the first card. Answer: _____	
Find the probability of selecting a Jack in a first card and queen in a second card after replacing the first card. Answer: _____	
Find the probability of selecting 6 or 7 in a first draw and 8 or 9 in a second draw without replacing the first card. Answer: _____	

Student Name: _____ **Score:**

Answers

Find the probability of selecting a king in a first card. Answer: $\frac{1}{13}$	
Find the probability of selecting a king in a second card if the first card is king and is not replaced. Answer: $\frac{1}{17}$	
Find the probability of selecting a king in a first card and queen in a second card without replacing the first card. Answer: $\frac{4}{52} * \frac{4}{51} = \frac{4}{663}$	
Find the probability of selecting a Jack in a first card and queen in a second card after replacing the first card. Answer: $\frac{4}{52} * \frac{4}{52} = \frac{1}{169}$	
Find the probability of selecting 6 or 7 in a first draw and 8 or 9 in a second draw without replacing the first card. Answer: $\frac{8}{52} * \frac{8}{52} = \frac{4}{169}$	