Fielding Percentage

Activity	Time	Description
Activity 1	30 minutes (optional 10 minute activity)	Youth will use fractions, decimals and percent to represent the proportion of 10 trials that resulted in a specific outcome (a “catch”). This activity will be done with baseball cards. There is an optional activity for youth to practice fielding percentage with tennis balls.
Activity 2	20 minutes	Youth will watch a video and discuss how they can learn from mistakes. Youth set SMART goals related to new challenges.

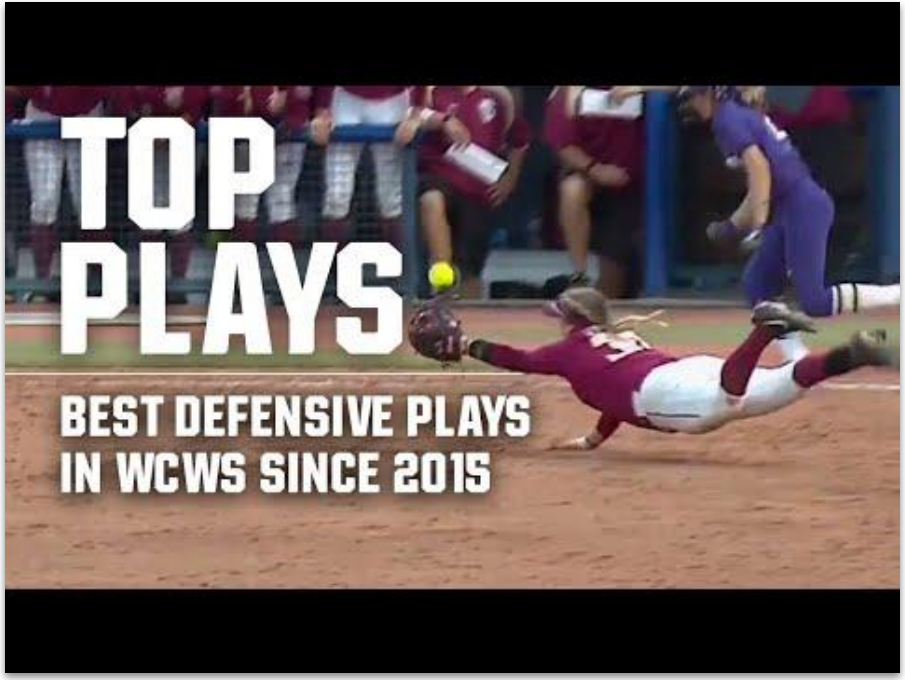
Fielding Percentage & the Value of Mistakes

What does this quote mean to you?
What message is Amanda trying to send?

"This game is about the long run. Pick successes that can build your confidence over time. There is always light at the end of the tunnel, but you can't see the light if you fall into the trap of all the failures trying to pull you down."
– Amanda Scarborough

Powerful Fielding Moments

https://www.youtube.com/watch?v=MCagd71zmFw



Video: Top Women's College World Series softball defensive plays

- What did you notice?
- What helps players make these incredible catches?
- Do you think they were able to do it this well on the first time they tried?

Fielding Using Fractions, Decimals, and Percent

- What does fielding percentage mean?


Dale Zanine/USA Today Sports


Keith Johnston/Pixabay

- How is fielding percentage calculated?

Fielding Using Fractions, Decimals, and Percent

- What does fielding percentage mean?

How often you catch the ball when it comes to you on the field.

- How is fielding percentage calculated?

Number of times you catch the ball divided by the number of times you attempt to catch the ball.

Example:
10 balls comes to you, and you catch 6.
Your fielding percentage is: 6/10 or 60%

Partner Activity:
Catching Cards and Calculating Fielding Percentage

The "**Catcher**" crouches down, with their hands out in front of them, by their feet.

The "**Catcher**" tries to catch as many cards as possible.

The "**Catcher**" makes 2 piles. 1 pile for cards they caught, and 1 for cards they missed.

The "**Pitcher**" holds their arm out straight in front of them, at shoulder level.

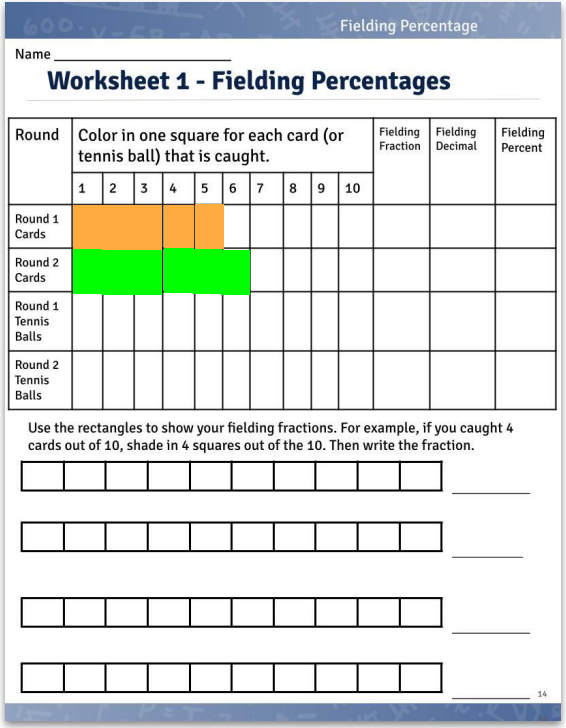
The "**Pitcher**" drops 10 baseball cards, one at a time, for the catcher to catch.

Calculating Field Percentage: Catching Cards Activity

Partner #1 is the “**Pitcher**”

Partner #2 is the “**Catcher**”

1. The **Pitcher** drops 10 cards, 1 at a time.
2. The **Catcher** tries to catch each card.
3. The **Catcher** counts how many catches are made out of 10. (Make 2 piles, 1 pile for catches and 1 pile for misses)
4. The **Catcher** colors in one square for each successful catch.
5. The **Catcher** and the **Pitcher** switch roles and repeat the activity.
6. Discuss how to improve your results. Give each partner another chance to catch the cards. (Round 2)



Fielding Percentage

Name _____

Worksheet 1 - Fielding Percentages

Round	Color in one square for each card (or tennis ball) that is caught.										Fielding Fraction	Fielding Decimal	Fielding Percent
	1	2	3	4	5	6	7	8	9	10			
Round 1 Cards													
Round 2 Cards													
Round 1 Tennis Balls													
Round 2 Tennis Balls													

Use the rectangles to show your fielding fractions. For example, if you caught 4 cards out of 10, shade in 4 squares out of the 10. Then write the fraction.

_____

_____

_____

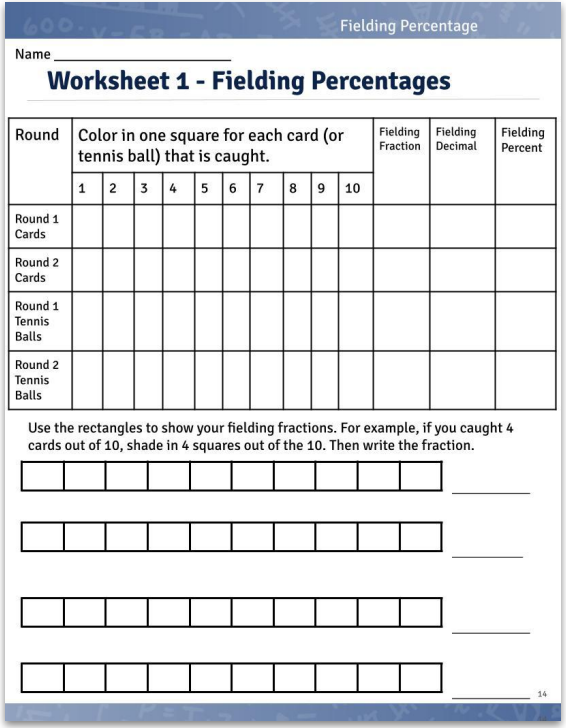
_____

14

Activity 1

Calculating Field Percentage: Catching Cards Activity

How can we use **fractions**, **decimals** or **percents** to represent our results?



Fielding Percentage

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Round 1 Tennis Balls													
Round 2 Tennis Balls													

Use the rectangles to show your fielding fractions. For example, if you caught 4 cards out of 10, shade in 4 squares out of the 10. Then write the fraction.

_____

_____

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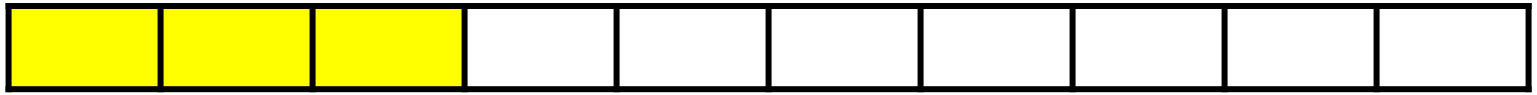
_____

14

Activity 1

Represent fielding percentage as a **FRACTION**

- 3 catches out of 10 attempts = **3/10**



- 7 catches out of 10 attempts = **7/10**

numerator
(number of parts we

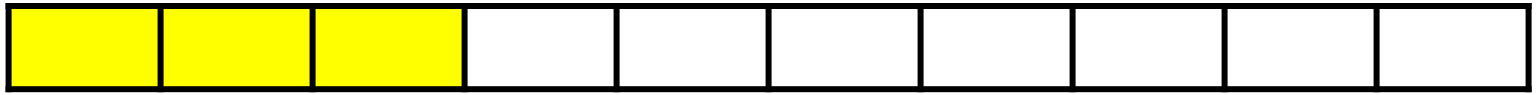
$$\frac{7}{10}$$

$$\frac{2}{5}$$

denominator
(total parts in whole)

Represent fielding percentage as a DECIMAL

- 3 catches out of 10 attempts = **3/10 or 0.3**



- 7 catches out of 10 attempts = **7/10 or 0.7**

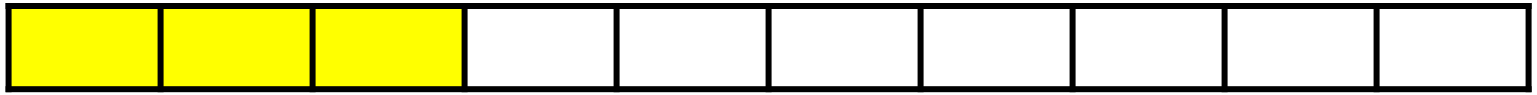
0.7 seven tenths

0.1 +0.1 +0.1 +0.1 +0.1 +0.1 +0.1 = 0.7

Ones	Decimal Point	Tenths
0	.	7

Represent fielding percentage as a **PERCENT**

- 3 catches out of 10 attempts = **3/10** or **0.3** or **30%**



- 7 catches out of 10 attempts = **7/10** or **0.7** or **70%**

70% **seventy** **percent**

(number of parts) (of 100 equal parts)

$$\frac{70}{100}$$

Refresher: Fractions, Decimals, and Percents

$\frac{3}{10} =$

Ones	Decimal Point	Tenths
0	.	3

$\frac{7}{10} =$

Ones	Decimal Point	Tenths
0	.	7

$\frac{51}{100} =$

Ones	Decimal Point	Tenths	Hundreths
0	.	5	1

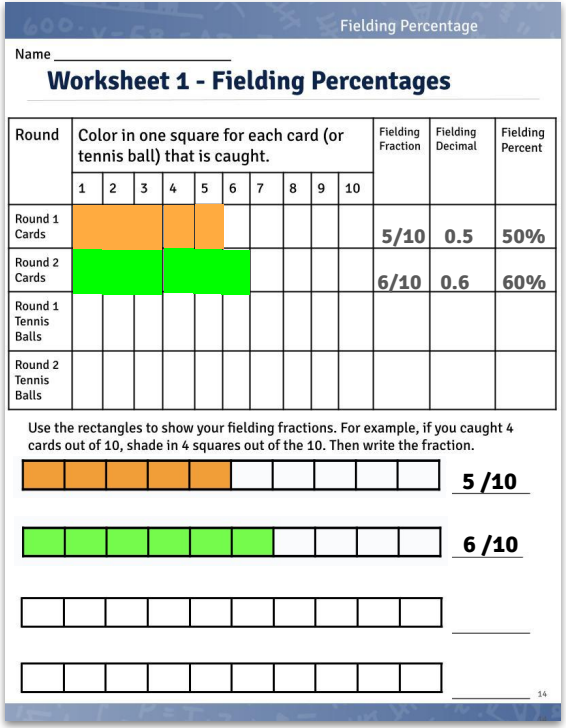
Optional video:

Math Antics – What are Percentages?

(0-4:00 minutes)
https://www.youtube.com/watch?v=JeVSmq1Nrpw/

Calculating Field Percentage: Catching Cards Activity

1. The **Pitcher** drops 10 cards, 1 at a time.
2. The **Catcher** tries to catch each card.
3. The **Catcher** counts how many catches are made out of 10. (Make 2 piles, 1 pile for catches and 1 pile for misses)
4. The **Catcher** colors in one square for each successful catch.
5. The **Catcher** and the **Pitcher** switch roles and repeat the activity.
6. Discuss how to improve your results. Give each partner another chance to catch the cards. (Round 2)
7. Next, write a **fraction**, a **decimal** and a **percent** to represent your results for each round.



Fielding Percentage

Name _____

Worksheet 1 - Fielding Percentages

Round	Color in one square for each card (or tennis ball) that is caught. 1 2 3 4 5 6 7 8 9 10	Fielding Fraction	Fielding Decimal	Fielding Percent
Round 1 Cards		5/10	0.5	50%
Round 2 Cards		6/10	0.6	60%
Round 1 Tennis Balls				
Round 2 Tennis Balls				

Use the rectangles to show your fielding fractions. For example, if you caught 4 cards out of 10, shade in 4 squares out of the 10. Then write the fraction.

5 /10

6 /10

_____

_____

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Activity 1

Sharing Our Results: Pop Up! Or Clap Game

For each statement, **Pop Up and/or Clap** if the statement is true for you!

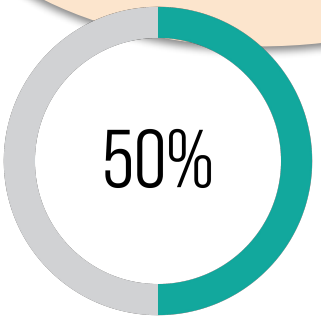
Statement 1: If you caught exactly 5 of the 10 cards/balls, pop up!

Statement 2: If you caught exactly 70% cards/balls, pop up!

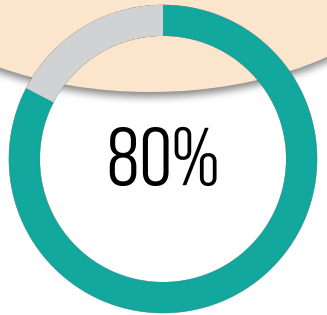
Statement 3: If you caught 8/10 or more of the cards/balls, pop up!

How did YOUR Field Percentage compare to Typical fielding percentages?

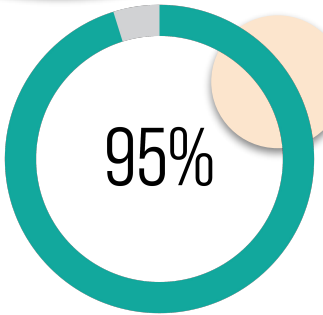
Youth 50%



College 80%



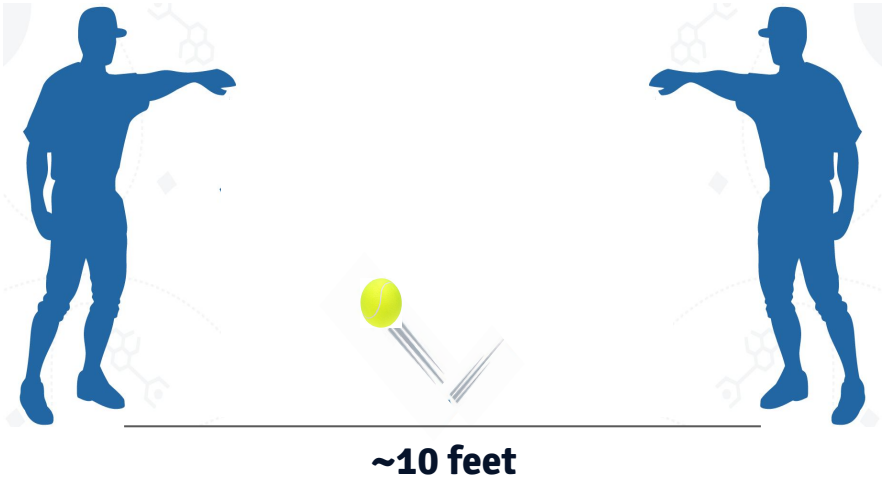
Pro 95%



Partner Activity
Catching Tennis Balls & Calculating Fielding Percentage

The “**Pitcher**”and the “Fielder” stand about 10 feet apart.

The “**Pitcher**” starts with the tennis ball and bounces it towards the “Fielder.”



The “**Fielder**” waits for the ball to bounce and then tries to catch it.

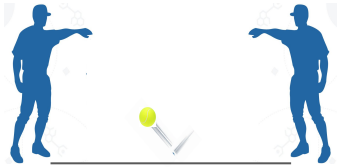
The **“Fielder”** counts how many successful catches are made out of 10, and records results.

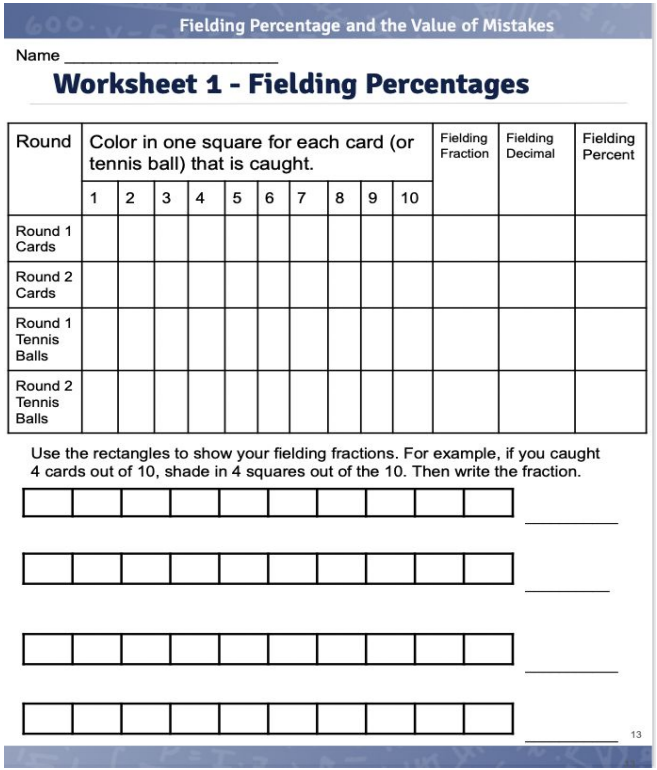
Calculating Field Percentage: Catching Tennis Balls Activity

Partner #1 is the **Pitcher** and Partner #2 is the **Fielder.**

1. The **pitcher** bounces a tennis ball towards a fielder.
2. The **fielder** waits for the ball to bounce once and then tries to catch it.
3. The **pitcher** and **fielder** repeat this 10 times.
4. The **fielder** counts how many successful catches are made out of 10, and records results on **Worksheet 1**. (Color in one square for each successful catch.)
5. Next, write a **fraction**, a **decimal** and a **percent** to represent the results.
6. The **Catcher** and the **Pitcher** switch roles and repeat the activity.

Discuss how to improve your results and repeat steps 1 - 6
Try to catch more this time!





Fielding Percentage and the Value of Mistakes

Name _____

Worksheet 1 - Fielding Percentages

Round	Color in one square for each card (or tennis ball) that is caught.										Fielding Fraction	Fielding Decimal	Fielding Percent
	1	2	3	4	5	6	7	8	9	10			
Round 1 Cards													
Round 2 Cards													
Round 1 Tennis Balls													
Round 2 Tennis Balls													

Use the rectangles to show your fielding fractions. For example, if you caught 4 cards out of 10, shade in 4 squares out of the 10. Then write the fraction.

_____

_____

_____

_____

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Activity 1

- What was your fielding percentage? As a fraction? Decimal? Percent?
- What did you do to improve your fielding percentage in Round 2?

Activity 2: Learning from Mistakes (Growth Mindset!)

- Can you think of a time when you made a mistake (in sports, in school, or at home) and then thought about the mistake and learned from it?

Why Growth Mindset is Important

- Failing doesn't make you a failure

Video:
https://devzone.positivecoach.org/resource/video/failing-one-time-doesnt-make-you-failure

- What was the coach's main message?

Why Growth Mindset is Important

- Mindset matters

Video:
https://www.youtube.com/watch?v=Q_EyPX3CD-g

- What was the video's main message?
- Why are mistakes and failures important?

Demonstrate: SMART Goals

- S → Specific (clear and concise goal that you would like to achieve)
- M → Measurable (your goal should be easy to measure and track)
- R → Relevant (your goal should relate to something that is important to you, that you case about)

Activity 2

Partner Activity: SMART Goals

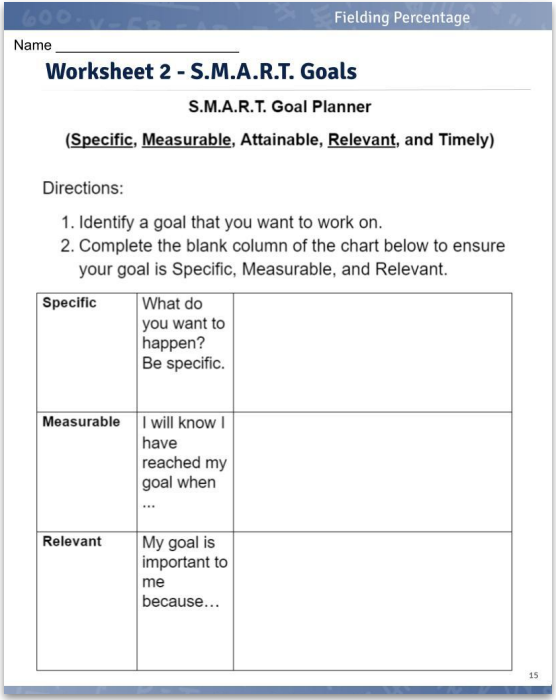
Think of a Goal… Something you want to work on in School, in Sports, at Home, or in another Activity. Share your goal with a partner.

My goal is to run 1 mile in less than 10 minutes by July 31 of this year.

My goal is important to me because I want to run a race next year and I need to get faster.

My goal is to turn in my math homework every day for a month.

My goal is important to me because I am trying to be more responsible at school.



Fielding Percentage

Name _____

Worksheet 2 - S.M.A.R.T. Goals

S.M.A.R.T. Goal Planner

(Specific, Measurable, Attainable, Relevant, and Timely)

Directions:

1. Identify a goal that you want to work on.
2. Complete the blank column of the chart below to ensure your goal is Specific, Measurable, and Relevant.

Specific	What do you want to happen? Be specific.	
Measurable	I will know I have reached my goal when …	
Relevant	My goal is important to me because…	

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Activity 2

- What are some goals that you identified?
- How will your goal help you learn something new?