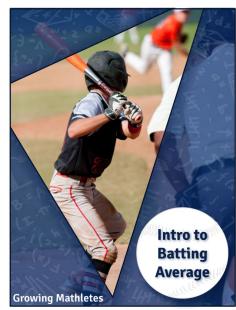
# **Batting Average 1: Comparing Stats**

Activity	Time	Description
Activity 1	40 minutes	Youth explore baseball cards and learn about batting average. Youth compare batting averages of different players and order the batting averages from least to greatest.
Activity 2	20 minutes	Youth will reflect on mistakes they have made recently, and learn about how mistakes make their brains grow!



# **Batting Average 1: Comparing Stats**

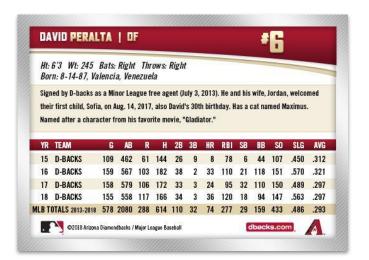
What does this quote mean to you? What message is Michael Jordan trying to send?

I've missed more than 9,000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game-winning shot and missed. I've failed over and over again in my life. And that is why I succeed.

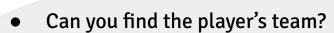
-Michael Jordan

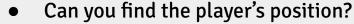






Look at your baseball card for a FIELD PLAYER.





- What other important information do you see on the card?
- What information is given with whole numbers? With decimals?

Share what you notice with a partner.



# Reading the Back of a Baseball Card

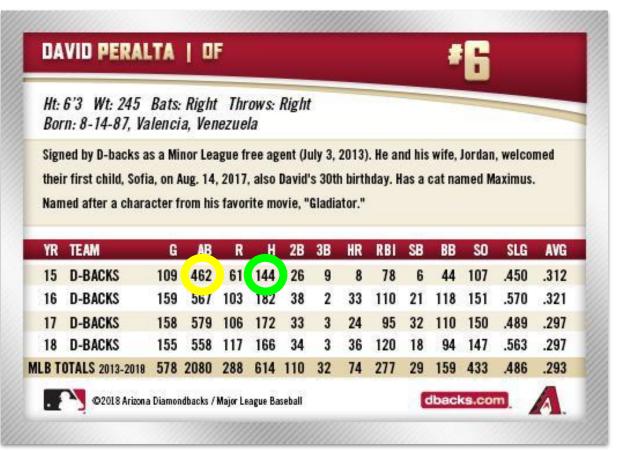
#### **AB means "AT BATS"**

This is the number of times the player comes to the plate and this results in a hit, or an error, or a non-sacrifice out.

#### H means "HITS"

This is the number of times the player hit the ball and did not get out.

What do you notice about your player's AB and H?



# **Comparing Baseball Statistics**



Discuss with a partner.

Compare the AT BATS (AB) and the HITS (H) on your cards.

Why are AB different than H?

Which player has more at bats? Which player has more hits?

Which player has the **most Hits (H)** of all the players in the room?

Which player has the **most At Bats (AB)** of all the players in the room?





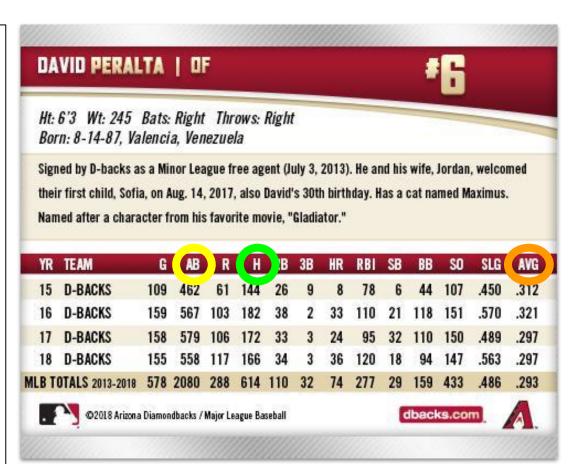
#### AVG or BA means "Batting Average"

You find the batting average by dividing the number of "Hits" by the number of "At Bats"

$$\frac{\textbf{Batting Average} = \frac{\textbf{Hits}}{\textbf{Atbats}}}{}$$

What is your player's **AVG or BA?** 

- What year did Peralta have the highest batting average?
- Is your player's batting average higher or lower than Peralta's?



# Batting Average = Hits Atbats

Suzie got 4 hits, out of 10 at bats.
What is her batting average?

$$\frac{4}{10}$$

= 0.4 or 0.400

4 tenths

400 thousandths

Andre got 3 hits, out of 10 at bats.
What is his batting average?

= 0.3 or 0.300

3 tenths

300 thousandths



Emmet has 24 hits of 100 at bats.

What is his batting average?

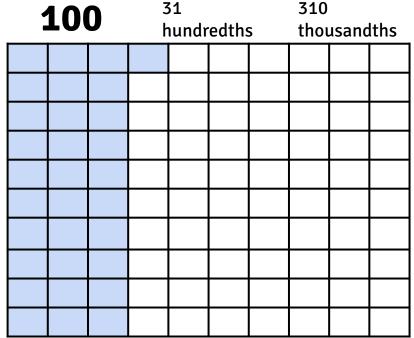
**24** = 0.24 = 0.240

24 240 100 thousandths hundredths

Selena has 31 hits of 100 at bats.

What is her batting average?

**31** = 0.31 = 0.310



Activity 1

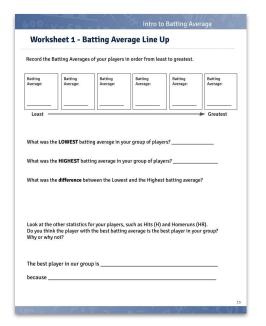
# **Small Group Activity: Batting Average Line Up**

Each person needs 1 baseball card.

Find each player's most recent Batting Average.

Place your baseball player cards in order from the **Least/Lowest Batting Average** to the **Greatest/Highest Batting Average**.

Record your Line Up on Worksheet 1.



Worksheet 1

Player 1	

Player 2	
BA:	

Player 3	
BA:	_

Play	er 4	
BA:		

Player 5
BA:

Player 6	
BA:	

Lowest Batting Average

Highest Batting Average

### **Small Group Activity: Batting Average Line Up**

Player 1 BA:

Player 2

BA: \_\_\_\_\_

Player 3

BA: \_\_\_\_\_

Player 4

BA: \_\_\_\_\_

Player 5

BA: \_\_\_\_\_

Player 6

BA: \_\_\_\_\_

Lowest Batting Average

Highest Batting Average

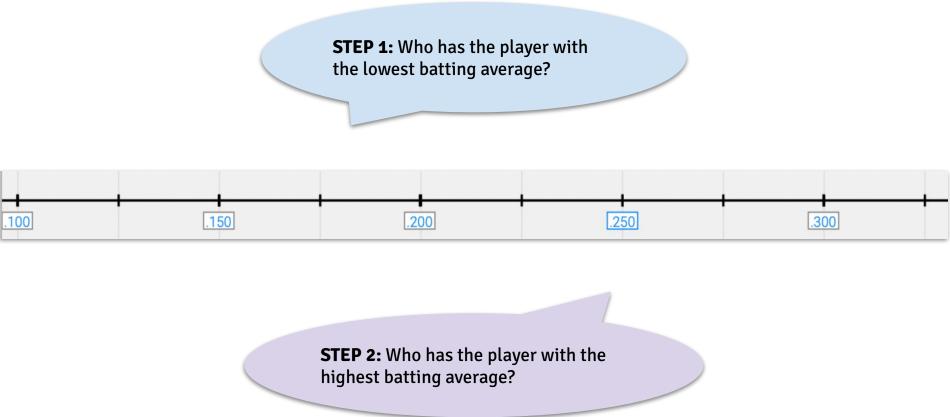
Is the player with the highest batting average the "best" player?

Look at the other player statistics on your baseball cards such as the Hits and Home Runs.

Decide which of the players on your baseball cards is the "best" player and record your reasons on **Worksheet 1.** 

			in order from lea	ast to greatest.	
latting lwerage:	Batting Average:	Batting Average:	Batting Average:	Batting Average:	Batting Average:
Least —					→ Greatest
What was t	ne <b>LOWEST</b> batt	ing average in y	our group of play	ers?	
What was ti	ne <b>HIGHEST</b> batt	ting average in	our group of play	yers?	
	na difference ha	tween the Lowe	st and the Highe	st batting avera	ge?
What was ti	ic difference be				
What was ti	ic difference of				
ook at the	other statistics k the player with		, such as Hits (H) g average is the l		
ook at the Oo you thin Why or why	other statistics : k the player with not?	the best battir		best player in yo	ur group?

#### **Whole Group Activity: Batting Average Line Up**



#### Whole Group Activity: Batting Average Line Up

Step 3: Who has a player with a batting average that is greater than 0.200?

Who has a player with a batting average that is greater than the Lowest Batting Average, but still less than 0.225?

Who has a player with a batting average that is less than the Highest Batting Average, but still above 0.275?



Who has a player with a batting average between 0.200 and 0.250?

Who has a player with a batting average between 0.250 and 0.300?





- What does batting average mean? How is it calculated?
- What is considered a "good" batting average in baseball? a "typical" batting average?
- Can you think of other situations where we use averages?

#### **Grade 6-8 Extensions**

• Pick 1 player from the Dodgers

Hits: 154

- Use Division to find their batting average in April 22, in May 22 and all season
  - Divide the number of HITS by the number of AT BATS

O Divide the number of HTS by the number of Al BAIS					
2022 April	Mookie Betts (Dodgers) At Bats: 74 Hits: 17	Trea Turner (Dodgers) At Bats: 76 Hits: 21	Freddie Freeman (Dodgers) At Bats: 77 Hits: 23		
0000	AA 1: D. II	T T	E 11: E		

	At Bats: 74	At Bats: 76	At Bats: 77
	Hits: 17	Hits: 21	Hits: 23
2022 May	Mookie Betts At Bats: 114 Hits: 31	Trea Turner At Bats: 115 Hits: 36	Freddie Freeman At Bats: 111 Hits: 34
2022	Mookie Betts	Trea Turner	Freddie Freeman
All Season	At Bats: 572	At Bats: 652	At Bats: 612

Hits: 194

Hits: 199

#### **Grade 6-8 Extensions**

#### Compare your answers to the correct answers below:

2022 April	Mookie Betts (Dodgers) AVG: .230	Trea Turner (Dodgers) AVG: .276	Freddie Freeman (Dodgers) AVG: .299
2022	Mookie Betts	Trea Turner	Freddie Freeman
May	AVG: .342	AVG: .313	AVG: .306
2022	Mookie Betts	Trea Turner	Freddie Freeman
All Season	AVG: .269	AVG: .298	AVG: .325

What do you notice about the monthly batting averages? The all season average?



#### **Grade 6-8 Extensions**

- What do you notice about the monthly batting averages?
- What did you notice about the all season average?
- Does a player's average vary more at the beginning or end of the season? Why?
- If a player experiences a hitting streak, will it improve his current average more at the beginning, middle, or end of the season?





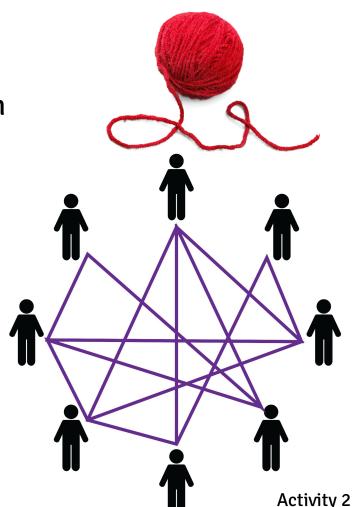
Mistakes are expected in baseball.

What kind of mistakes do you think batters make?

How do you think baseball players learn from their mistakes at bat?

How are batters' mistakes opportunities for learning?

- Stand in a circle with 5-6 peers. One person in your group will start with the ball of yarn.
- Next, you will listen to a scenario about a situation at school or in sports.
- As you listen, think about the mistake in the scenario and what the person could do or say or think to themselves to learn from the mistake.



Keith had a hard night at baseball practice. He was working on his throw, and trying to throw faster to his teammate.

But his aim was off!

He threw the ball too wide, and then too short. He ended the practice and thought, "I keep messing up. I just can't throw the ball."

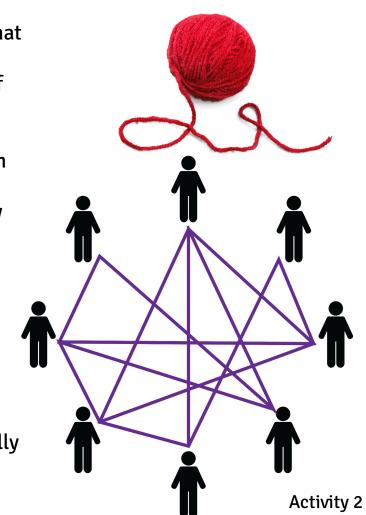
What should Keith do?



- The person holding the yarn will share one idea about what Keith could do or say or think to learn from the mistake.
- Next, the person with the ball of yarn will hold the end of the string, and pass the ball of yarn to another person in the group.
- Then that person shares a different idea about what Keith could do, or say, or think to learn from the mistake, and then holds the string and passes the ball of yarn to a new group member.
- Continue until 3 or 4 group members have shared ideas about Keith's scenario.

#### Then get ready for a new scenario!

- After each scenario, 3 or 4 group members will pass the yarn and then share ideas about what the person in the scenario could do or say to learn from the mistake.
- Remember to keep holding the yarn and to pass it carefully and slowly so that it does not fall.



Nora was starting a new unit on percents in her math class. She thought she understood how to find percents when her teacher explained it during class, but when she started her homework she felt very confused.

None of her answers looked right.

Nora's older sister came by and said, "What? You don't know how to do percents? That's so easy!" Nora felt even worse. She thought she would never understand percents.

What should Nora do?



Mia's team needed one more out to end the inning and win the game. She was playing first base. There were batters on second and third and the other team was trying to get a hit and score two more runs for the win.

The batter hit a line drive straight to Mia. This would be easy! She leaned in to catch the ball but it slipped out of her glove and the batter made it safe to first base. By the time Mia retrieved the ball, the other batters had reached home plate. Mia felt like it was all her fault. She missed the catch and her team lost the game. What should Mia do?



Julio was checking his math homework with his friend Henry. On the fraction addition problem, Henry had a different answer.

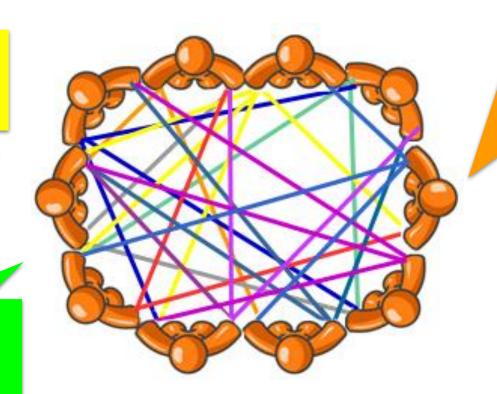
Julio was trying hard to figure out how to add the fractions, but this was a new concept and he still had a lot of questions. Henry told him, "just erase your answer and copy mine, then you'll get it right!" What should Julio do?



## What do you notice about our web?

Many lines!

Lots of connections!



This is what happens in our BRAIN!

Mistakes help us make new connections and learn...

#### Watch How Our Brains Grow When We Make Mistakes!

**Mindset Matters** 





Share with a partner:

What did you learn from this video?



What strategies can you use to learn and grow from mistakes in sports, or in school?