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PRINTABLE | GRADES 6-8 · AGES 11–14

Beat the Shot Clock

Read how a little division saved pro basketball, then answer with evidence and math. The history is real; teams on page 2 are made up.

Name _____

Date _____

READING + MATH TOOLKIT

Context clue	Central idea	Evidence	Rate	% change
nearby words that explain a new word	what the whole text is mostly about	the exact sentence that proves it	amount ÷ time (seconds per shot)	change ÷ original × 100



2,880 ÷ 120 = 24

READ THE ARTICLE

The 24 Seconds That Saved the NBA

1 In the early 1950s, pro basketball had a problem called **stalling**. A team with the lead could hold the ball, dribbling and passing far from the basket, just to burn time off the clock. The other team's only answer was to foul, so games turned into long, slow parades to the free-throw line. On November 22, 1950, the Fort Wayne Pistons beat the Minneapolis Lakers 19–18, still the lowest-scoring game in NBA history.

2 Danny Biasone, owner of the Syracuse Nationals, and his general manager, Leo Ferris, believed the game needed a time limit. In baseball, a team gets three outs. In football, a team must gain 10 yards in four downs or give up the ball. In basketball, a team with a good dribbler could keep the ball as long as it liked.

3 Their number came from simple division. A 48-minute game lasts 2,880 seconds, and in a typical game the two teams took about 120 shots in all. Since 2,880 ÷ 120 = 24, a team would get 24 seconds to try a shot or lose the ball. In August 1954, they tested the idea in a scrimmage at a high school gym in Syracuse. The league **adopted** the rule for the 1954–55 season, along with a limit on team fouls in each quarter.

4 The change was immediate. Teams averaged 79.5 points per game in 1953–54 and 93.1 in 1954–55, a jump of 13.6 points. Shots per team climbed from about 75.4 to 86.4 a game. The Boston Celtics became the first team to average more than 100 points in a season, and three years later every team did. Syracuse won the 1955 championship.

5 Today the NBA, the WNBA and international (FIBA) games all use a 24-second clock. Most college games use 30 seconds. Every crowd countdown is Biasone's math at work.

ROOKIE

1 Use paragraph 1. How many **total points** did both teams score in the 1950 Pistons–Lakers game?

WORK SPACE

_____ points

ROOKIE

2 In paragraph 1, the word **stalling** most likely means

A rushing every shot
B holding the ball to use up time
C fouling on purpose
D playing without a coach

Letter _____

STARTER

3 Paragraph 2 compares basketball with baseball and football. What point does the comparison make?

_____

_____

_____

STARTER

4 Show where Biasone's **2,880** comes from. Then show why it leads to **24** seconds.

WORK SPACE

_____ seconds

PRO

5 Use paragraph 4. By what **percent** did average team scoring rise in the first shot-clock season? (nearest tenth)

WORK SPACE

_____ %

PRO

6 In 1954–55 each team took about **86.4** shots a game. Counting both teams, how many seconds passed per shot? (nearest tenth)

WORK SPACE

_____ seconds

ALL-STAR

7 Which sentence best states the **central idea** of the article?

A The Lakers lost a low-scoring game.
B Syracuse ruled the 1950s.
C A math-based time limit ended stalling.
D Free throws are exciting.

Letter _____

CHALLENGE ★

8 Challenge: FIBA games last **40 minutes**. Using Biasone's math backward, how many total shots would a 24-second clock expect in a FIBA game?

WORK SPACE

_____ shots

A Pace Tracker

Seconds per possession = game seconds ÷ possessions (both teams together). Round to the nearest tenth.

GAME	MINUTES	SECONDS	POSSESSIONS	SEC / POSS.
Hawks vs. Lynx	48	2,880	200	
Pilots vs. Comets	48	2,880	192	
Youth league final	32	1,920	128	
College showcase	40	2,400	150	

1. Which game had the **fastest pace** (fewest seconds per possession)?

   _____

2. In a 48-minute game, if **every** possession used all 24 seconds, how many possessions would there be in all?

   _____ **possessions**

B Then vs. Now

Percent change = (new – original) ÷ original × 100. Is it an increase or a decrease?

1. The Harbor City Hawks averaged **80** points a game before their league added a shot clock and **96** after. Find the percent increase.

   WORK SPACE

   _____ %

2. The Hawks' free throws per game dropped from **40** to **30** after the new foul limit. Find the percent decrease.

   WORK SPACE

   _____ %

3. A **32-minute** youth game uses a **30-second** clock. If every possession used the full 30 seconds, how many possessions in all?

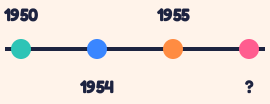
   WORK SPACE

   _____ **poss.**

C Sequence It

Number the events 1 to 4 in the order they happened. Look back at paragraphs 1, 3 and 4.

- ☐ Every NBA team averages more than 100 points a season.
- ☐ Biasone and Ferris test a 24-second clock in a Syracuse gym.
- ☐ The Pistons beat the Lakers 19–18.
- ☐ Syracuse wins the championship in the first shot-clock season.



USE THE ARTICLE FOR DATES

BONUS · NOT SCORED

Watch a few minutes of any basketball game. Time 5 possessions with a stopwatch. What was the average? Did any team come close to 24?

Answer Key (for teachers & parents)

Answers for **Beat the Shot Clock**, with the work shown. Print pages 1 and 2 for students and keep this page for checking. Accept answers within a tenth from rounding. The history on page 1 is real; teams on page 2 are made up.

Page 1 Problems

1. Answer: **37 points**
   19 + 18 = 37 (paragraph 1)
2. Answer: **B**
   Holding the ball to use up time; clue: "just to burn time off the clock"
3. Answer: **Other sports had a limit that forced action; basketball had none**
   Accept answers that say a team could keep the ball as long as it liked
4. Answer: **24 seconds**
   48 min × 60 = 2,880 s; 2,880 ÷ 120 shots = 24
5. Answer: **17.1%**
   93.1 – 79.5 = 13.6; 13.6 ÷ 79.5 ≈ 0.171
6. Answer: **16.7 seconds**
   86.4 × 2 = 172.8 shots; 2,880 ÷ 172.8 ≈ 16.7
7. Answer: **C**
   The whole article explains how the 24-second rule fixed stalling
8. Answer: **100 shots**
   40 × 60 = 2,400 s; 2,400 ÷ 24 = 100

Quick score

Page 1 problems	_____ / 8
A · Pace Tracker (4 boxes + 2)	_____ / 6
B · Then vs. Now	_____ / 3
C · Sequence It	_____ / 4
Total	_____ **/ 21**

Skills practiced

Reading for evidence · Context clues · Central idea · Sequencing · Unit rates · Percent change · Sports history

Teaching tip: Before reading, play 30 seconds of a game with no clock and ask: what stops a team from holding the ball forever? After #4, have students build their own clock for a 32-minute game.

A · Pace Tracker

Table: Answer: **14.4, 15, 15, 16**
2,880÷200; 2,880÷192; 1,920÷128; 2,400÷150

1. Answer: **Hawks vs. Lynx**
   14.4 s is the smallest
2. Answer: **120 possessions**
   2,880 ÷ 24 = 120

B · Then vs. Now

1. Answer: **20% increase**
   96 – 80 = 16; 16 ÷ 80 = 0.20
2. Answer: **25% decrease**
   40 – 30 = 10; 10 ÷ 40 = 0.25
3. Answer: **64 possessions**
   32 × 60 = 1,920; 1,920 ÷ 30 = 64

C · Sequence It

1. Answer: **4, 2, 1, 3**
   Top to bottom: 100+ (about 1957–58), test (Aug 1954), 19–18 (1950), title (1955)

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