LESSON MAKER PRO

Pick Your Tool

Choose a smart method, solve, and check.

GRADE 7 · 7.MP.5

7.MP.5 "Use appropriate tools strategically."

NAME _____ DATE _____

CHOOSE STRATEGICALLY

First, decide what information you need and choose a tool that makes the math clear. A number line, table, equation, sketch, or estimate can help. Check that your answer fits the situation.

WORKED EXAMPLE

Maya has $27 to spend on game add-ons that cost $4.50 each. Choose a useful tool. How many add-ons can she buy without going over her budget?

1. Use division because each add-on has the same cost.
2. 27 / 4.50 = 6.
3. Check: 6 x 4.50 = 27.

Answer: Division or an equation, 6 add-ons.

PRACTICE 5 problems

1 A bus leaves the community center at 3:45 p.m. The ride takes 38 minutes. Name a useful tool, then find the arrival time.

ANSWER _____

2 The soccer team packs 144 water bottles into boxes of 12. Name a useful tool, then find the number of boxes needed.

ANSWER _____

3 A phone plan includes 3 GB of data. Watching one episode each day uses 0.6 GB. Name a useful tool, then find how many days the data will last.

ANSWER _____

4 The art club uses 3/4 cup of blue paint for each poster. It is making 5 posters. Name a useful tool, then find the total blue paint needed.

ANSWER _____

5 Mila starts with $14 and saves $9 each week for 7 weeks for a concert. Name a useful tool. Will she reach her $75 goal, and by how much?

ANSWER _____

APPLY IT Show your work

1 A school dance offers two ticket plans. Plan A costs $9 plus $2 for each game. Plan B costs $21 for unlimited games. Choose a table or equation. At how many games do the plans cost the same? Which plan costs less for 8 games?

WORK SPACE

ANSWER _____

2 The student council is printing name badges for a game night. Shop A charges a $6 setup fee plus $0.75 per badge. Shop B charges $18 total. Choose a table or equation. At how many badges do the shops cost the same? Which shop costs less for 12 badges?

WORK SPACE

ANSWER _____

CHALLENGE One step up

An online game controller costs $45. Deal A takes $11 off. Deal B takes 20% off. Which deal saves more? Explain how a percent calculation or another tool proves your answer.

WORK SPACE AND ANSWER

ANSWER KEY

Pick Your Tool

GRADE 7 · 7.MP.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A bus leaves the community center at 3:45 p.m. The ride takes 38 minutes. Name a useful tool, then find the arrival time.	**Number line or time counting, 4:23 p.m.**
2	The soccer team packs 144 water bottles into boxes of 12. Name a useful tool, then find the number of boxes needed.	**Division or an equal-groups sketch, 12 boxes.**
3	A phone plan includes 3 GB of data. Watching one episode each day uses 0.6 GB. Name a useful tool, then find how many days the data will last.	**Division, 5 days.**
4	The art club uses 3/4 cup of blue paint for each poster. It is making 5 posters. Name a useful tool, then find the total blue paint needed.	**Ratio table or multiplication, 3 3/4 cups.**
5	Mila starts with $14 and saves $9 each week for 7 weeks for a concert. Name a useful tool. Will she reach her $75 goal, and by how much?	**Equation or table, yes, she will have $77, which is $2 over her goal.**

PART 2 · APPLY IT

1. **The plans cost the same at 6 games. For 8 games, Plan B costs less by $4.** Solve $9 + 2x = 21$ to get $x = 6$. For 8 games, Plan A costs $25 and Plan B costs $21.
2. **The shops cost the same at 16 badges. For 12 badges, Shop A costs less by $3.** Solve $6 + 0.75x = 18$ to get $x = 16$. For 12 badges, Shop A costs $15 and Shop B costs $18.

CHALLENGE

Deal A saves more. Deal B saves 20% of $45, or $9, so Deal A saves $2 more.

Accept any reasonable tool that leads to the correct result and includes a valid check. Accept equivalent calculations, such as a table instead of an equation.