

Lesson: Ten Lap Challenge
Grades: K-1
Skills: Ways to make 10, number sense
Time: 20 minutes

What to do:

Tell students they have two days to run ten laps in the gym. Have them use the worksheet on the following page to show different ways they can split the laps between the two days of running. For example:

Day 1	Day 2
5 laps	5 laps
6 laps	4 laps
9 laps	1 lap

Be sure students get all the combinations that add to 10.

→ 0+10, 1+9, 2+8, 3+7, 4+6, 5+5, 6+4, 7+3, 8+2, 9+1, 10+0

Extend:

What would it look like if you used three days instead of 2?

What if you wanted to run 12 laps in the gym in 2 days?

Lesson: Counting Graph
Grades: K-1
Skills: Graphing, arithmetic
Time: 15 minutes/daily

What to do:

Use a graph to show the progress of the students in your class as they run laps. Use different color stickers on each day to show the week's total.

(Example uses shapes because of black and white printing.) Generate questions (like the samples on the next page) based on your graph.

Laps

15		♥	
14	♥	♥	♥
13	♥	●	♥
12	●	●	♥
11	●	●	●
10	●	▲	●
9	▲	▲	▲
8	▲	▲	▲
7	■	▲	▲
6	■	■	▲
5	■	■	■
4	■	★	■
3	★	★	■
2	★	★	★
1	★	★	★
	FRED	SAM	SUE

Key	
MONDAY	★
TUESDAY	■
WEDNESDAY	▲
THURSDAY	●
FRIDAY	♥

Lesson: Counting Graph (Continued)

Sample questions:

How many laps did Fred run this week in total?

How many laps did Sam run on Monday?

How many more laps did Fred run than Sue on Monday?

Which day did Sue run the most laps?

Lesson: Make a Marathon Counting Book

Grades: K-1

Skills: Counting, number sense

Time: 30 minutes

Materials:

Paper, colored pencils

What to do:

Tell students that when a runner runs a marathon, they have to run 26 miles! Tell them that instead of running 26 miles, they are going to draw something 26 times!

Ask: How can you keep track of how many times you have drawn a picture?

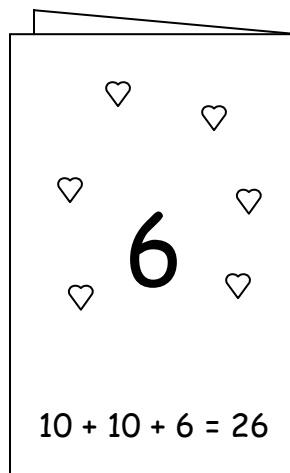
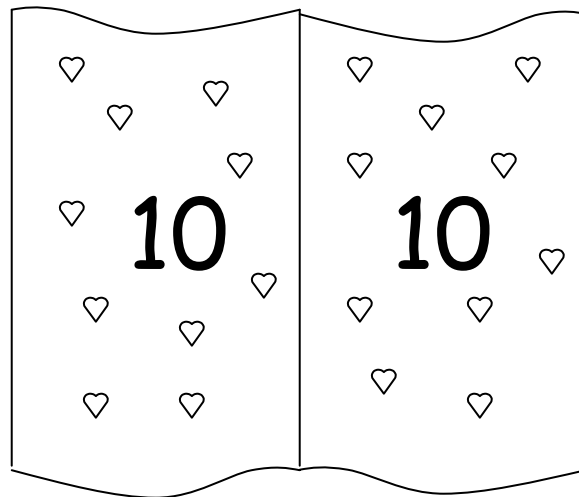
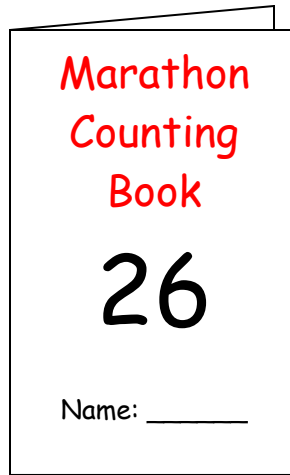
Activity:

1. Have students pick something to draw.
2. Ask children to fold a piece of paper in half and hold it so that the opening is on the right. See example on following page.
3. On the cover of the book students should write Marathon Counting Book, the number 26, and their name.
4. Tell the students they will draw their design of choice 26 times using all three pages of the book.
5. On first inside page, they should decide how many times they will draw their object and write the number under their drawing.
6. Repeat on second inside page.
7. Repeat on the back of the book, but underneath the drawings and number ask students to write the number sentence (equation) that shows how they added to 26.

Have them double check their work by going back and counting all their drawings.

Lesson: **Make a Marathon Counting Book (continued)**

Example:



Lesson: Measure the Gym
Grades: K-1
Skills: Non-standard measurement, counting
Time: Varies

What to do:

Tell students they are going to use a jump rope or another long object to measure the distance around your school's gym.

Ask: How will you use the jump rope so that we can measure accurately?

→ Two people will hold the ends of the jump rope making sure it is straight. One person will mark the end on the floor with chalk or their finger. Then they will move the jump rope to mark and measure again until they get back to where they started.

Activity:

Ask students to predict how many times the jump rope will have to be used to make it around the whole gym. Record predictions on the board and when finished with measurement, compare predictions to the actual number of times the rope had to be used.

Lesson: Mile Markers
Grades: K-1
Skills: Number sense, one to one correspondence
Time: 20 minutes

What to do:

Explain to students that the miles in a marathon are marked with signs so runners know how far they have gone. Ask the following questions and have students use manipulatives to solve them. When they are done, have students share their strategies.

Problem 1:

A runner runs a complete 26 mile marathon. If there is a sign at each mile, how many mile markers do they pass? Can you draw a picture or use counters to show your answer.

→ 26

Problem 2:

If the markers for mile 3, 9 and 14 are missing, how many mile markers would the runners pass?

→ 23

Challenge:

If there are mile markers at every other mile, for instance 1, 3, and 5, how many mile markers will a runner pass?

→ 13

Lesson: Mileage Graph
Grades: K-1
Skills: Graphing, arithmetic
Time: 20 minutes/extend to daily

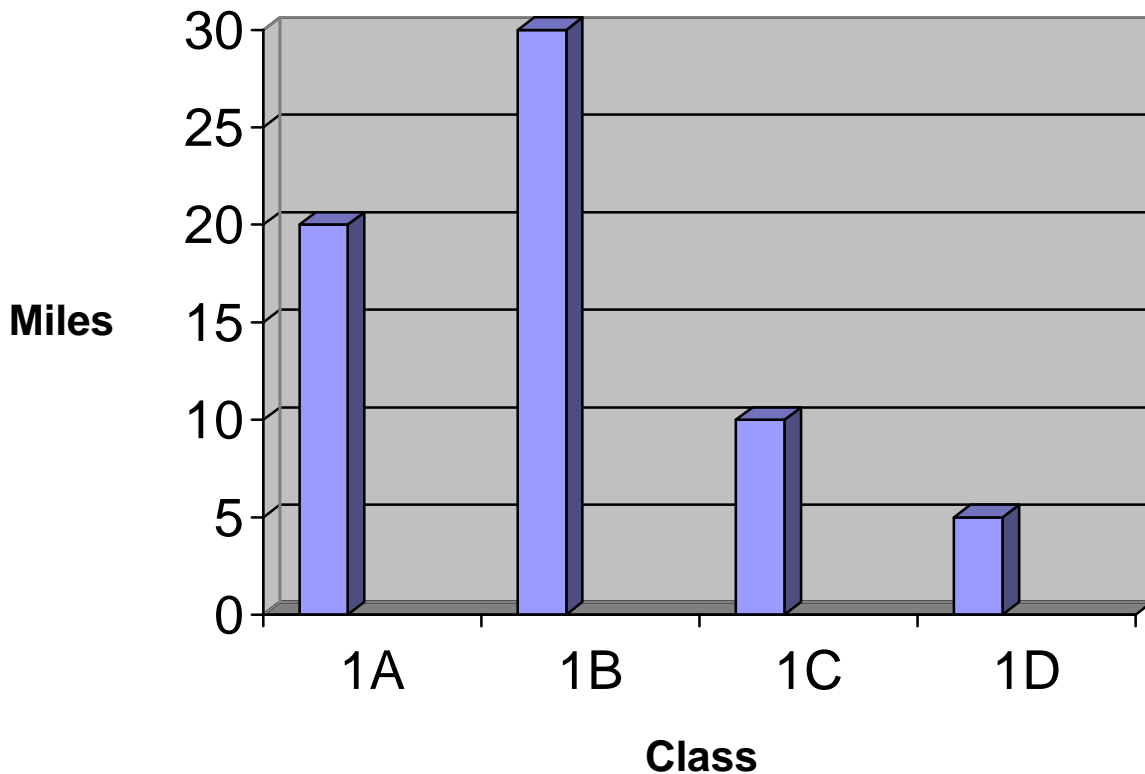
What to do:

Use the data from this graph to answer the problems on the following page.

Follow up:

Create a graph of the actual mileage of classes at your school and make this an ongoing project by generating your own data and questions.

Mighty Milers Graph



Lesson: Mileage Graph (Continued)

Question 1:

How many miles did the students in class 1A run?

→ 20 miles

Question 2:

How many more miles did the students in 1A run than the students in 1C?

→ 10 miles

Question 3:

Which class ran the most miles?

→ 1B

The least?

→ 1D

Challenge:

How many miles did the students of all four classes run together?

→ 65 miles

Lesson: Patterns of Runners

Grades: K-1

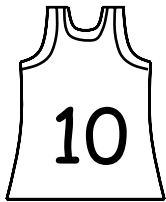
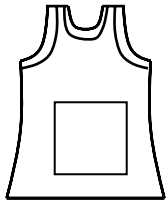
Skills: Patterning

Time: 20 minutes

What to do:

Tell students to look at the patterns on the runners' shirts on the following worksheet. Have them complete the pattern by filling in the correct number or shape.

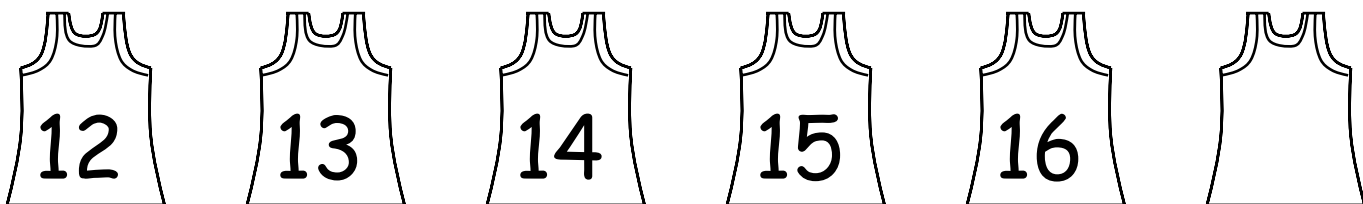
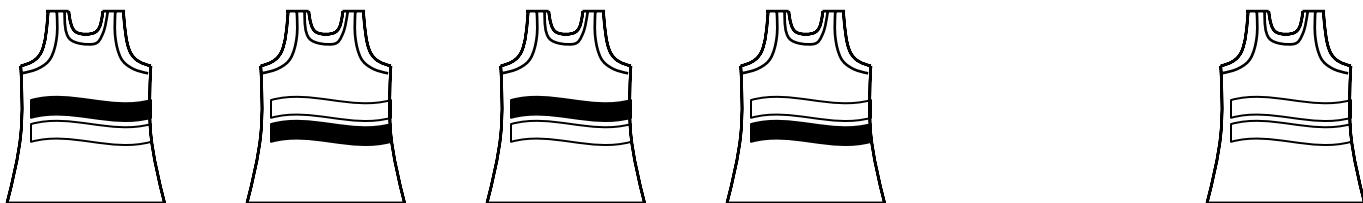
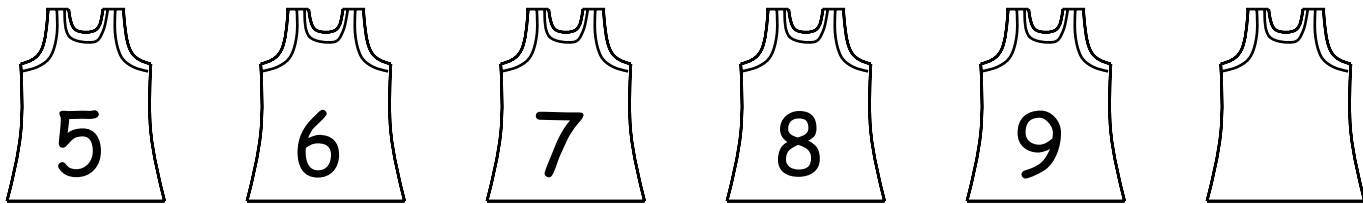
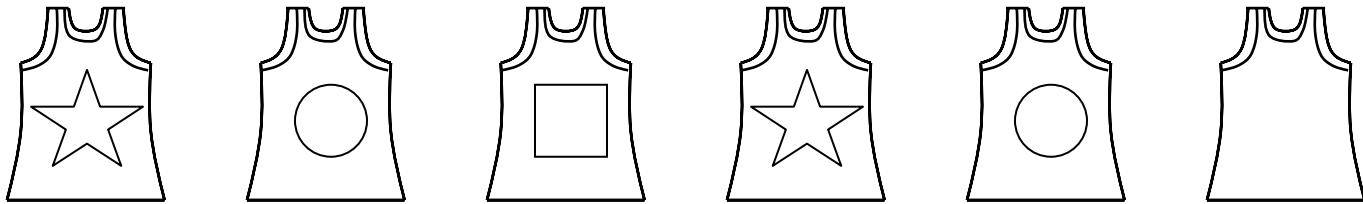
Answers:



Name: _____

Patterns Worksheet

Look at the pattern on each row of these runners' shirts. Try to figure out what would come next. Write it on the blank shirt.



Lesson: Race the Marathon Game

Grades: K-2

Skills: Addition

Time: 30 minutes

Race the Marathon!!!

What you need:

Game pieces and one 6-sided die

How to play:

All players put their game pieces on start box.

Players take turns rolling the dice and moving that many miles (spaces) forward.

The first player to get to **exactly** 26 miles wins!

(For example, if they are on the box for 23 miles, they must roll a 3 to win, a 4, 5, or 6 cannot be used.)

If a player lands on a spot with a star, **backward** one mile.












they must move their game piece

If a player lands on a spot with a circle, **forward** one mile.



they must move their game piece

Start	25 miles	24 miles	23 miles	22 miles	21 miles	20 miles	
1 mile	26 miles Finish 					19 miles	
2 miles	<div data-bbox="619 609 1480 1201" style="border: 1px solid black; padding: 10px;"> <p>Race the Marathon!!! What you need: <i>Game pieces and one die</i></p> <p>How to play: Put game pieces on start box. Take turns rolling the die and moving that many miles (spaces). The first player to get to exactly 26 miles wins!</p> <p>If you land on a spot with a star, you must move your game piece back one mile. </p> <p>If you land on a spot with a circle, you get to move your piece forward one mile. </p> </div>						18 miles
3 miles						17 miles	
4 miles 						16 miles	
5 miles						15 miles 	
6 miles 						14 miles	

7 miles	8 miles	9 miles	10 miles	11 miles	12 miles	13 miles
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Lesson: Shirt Sums
Grades: K-1
Skills: Ways to make 13, number sense
Time: 25 minutes

What to do:

Discuss different ways to make a sum of 13 (a half marathon) by adding two numbers. Tell students there are even more ways to make a sum of 13 using three addends.

Activity:

Distribute the worksheet on the following page. Encourage students to come up with ways to make 13 by adding three numbers and have them write their answers on the shirts. Give them the option to use counters if they have difficulty doing this without manipulatives.

→ 1 + 1 + 11
1 + 2 + 10
1 + 3 + 9
1 + 4 + 8
1 + 5 + 7
1 + 6 + 6
2 + 2 + 9
2 + 3 + 8
2 + 4 + 7
2 + 5 + 6
3 + 3 + 7
3 + 4 + 6
3 + 5 + 5
4 + 4 + 5

Name: _____

Shirt Sums Worksheet

Three runners are running a race and they have race numbers on their shirts. Write the numbers on each shirt so that the total is 13! Don't use the same number combination more than once.

$$\begin{array}{c} \text{5} \\ \text{5} \\ \text{3} \end{array} + + = 13$$

$$\text{[shirt]} + \text{[shirt]} + \text{[shirt]} = 13$$

$$\text{[shirt]} + \text{[shirt]} + \text{[shirt]} = 13$$

$$\text{[shirt]} + \text{[shirt]} + \text{[shirt]} = 13$$

$$\text{[shirt]} + \text{[shirt]} + \text{[shirt]} = 13$$