

Training Camp Blueprint

The made-up Bayside Bobcats are opening training camp, and the coaches need your help measuring everything. Count squares and use the scale to find area and perimeter.

Name _____

Date _____

MEASURING TOOLKIT

Area

length $\times$ width
(square units)

Perimeter

add all the
sides around

Scale

1 square side
= 10 yards

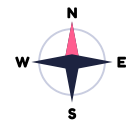
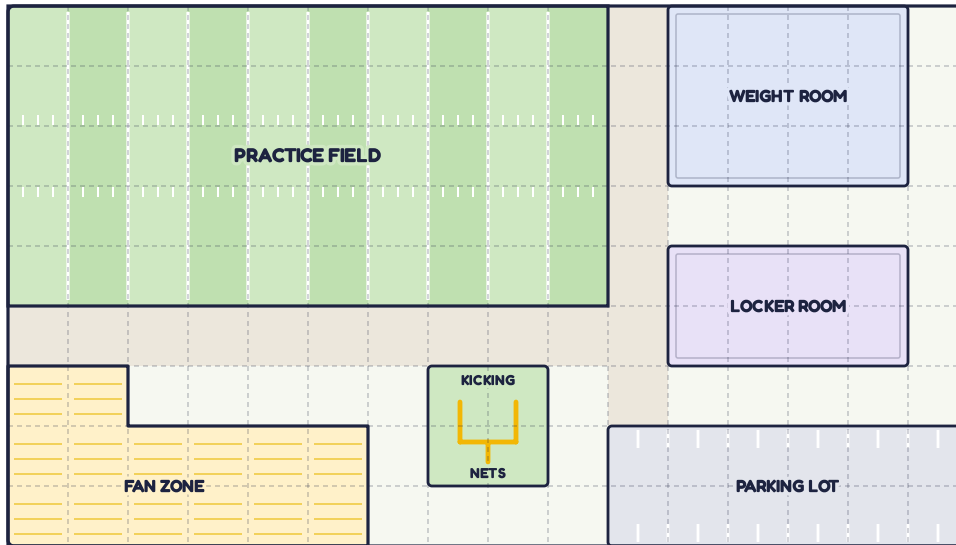
Feet & yards

1 yard =
3 feet

CAMP PRACTICE
DAY 3 9:00

COUNT • MEASURE • BUILD

BOBCATS TRAINING CAMP MAP



SCALE

1 square =
10 yards on
each side

Each square covers $10 \times 10 =$
100 square yards.

Tan paths are walkways, not part of
any area.

ROOKIE

- 1 What is the **area**, in square units, of the **Weight Room**?

WORK SPACE

_____ square units

ROOKIE

- 2 Look at the compass. Which building is **directly south** of the Weight Room?

WORK SPACE

STARTER

- 3 The Locker Room is **40 yards** long and **20 yards** wide. What is the **perimeter** of the Locker Room, in yards?

WORK SPACE

_____ yards

STARTER

- 4 What is the **difference**, in square units, between the area of the Locker Room and the area of the Kicking Nets?

WORK SPACE

_____ square units

PRO

- 5 What is the **area**, in square units, of the **Practice Field**?

WORK SPACE

_____ square units

PRO

- 6 The Practice Field is **100 yards** long and **50 yards** wide. How many yards is **one lap** around it?

WORK SPACE

_____ yards

ALL-STAR

- 7 The **Fan Zone** is made of two rectangles. What is its **total area**, in square units?

WORK SPACE

_____ square units

CHALLENGE ★

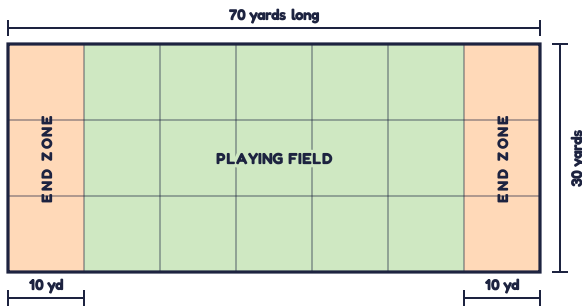
- 8 A fence goes around the Parking Lot (**60 yards by 20 yards**), except for a **10-yard** gate. How many yards of fence?

WORK SPACE

_____ yards

A Measure the Flag Football Field

The Bobcats' flag football field is shown below. Each square is 10 yards long on each side.



Bobcats flag football field, drawn on a grid.

- 1 **1 yard = 3 feet.** The field is **30 yards** wide. How wide is the field, in feet? _____ feet
- 2 The field is made of squares. What is the **area**, in square units, of **one** end zone? _____ square units
- 3 What is the **area**, in square units, of the green **playing field**? _____ square units
- 4 What is the **area**, in square units, of the **whole field**? _____ square units

B Measuring Words

Write the word from the bank that matches each meaning. One word is not used.

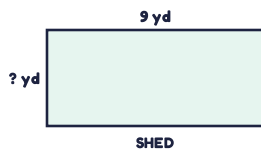
Word bank: area · perimeter · rectangle · square unit · volume

- 1 the distance all the way around the outside of a shape
- 2 the amount of flat space a shape covers
- 3 a square that is 1 unit long on each side, used to measure area
- 4 a shape with 4 sides and 4 square corners

C Plan New Spaces

Help the coaches plan new spaces at camp. Use the sizes shown on each figure.

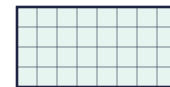
- 1 The perimeter of a rectangular shed is **30 yards**. The length is **9 yards**, as shown. What is the **width** of the shed, in yards?



WORK SPACE

_____ yards

- 2 The rectangle is made of unit squares, as shown. What is the **area**, in square units, of the rectangle?



WORK SPACE

_____ square units

- 3 Field A and Field B both have a perimeter of **24 units**. Which field has the **greater area**?



FIELD A

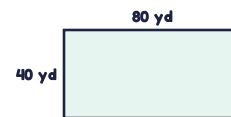


FIELD B

WORK SPACE

Field _____

- 4 A rectangular field is **80 yards** long and **40 yards** wide. How many yards of fence are needed to go **around** the field?



WORK SPACE

_____ yards

BONUS · YOUR TURN

Draw **two different rectangles** that each have a perimeter of **20 units**. Label the length and width of each one. Find the **area** of each one, in square units.

- 1 _____
- 2 _____
- 3 _____

Answer Key (for teachers & parents)

Answers for **Training Camp Blueprint**, with the work shown. Print pages 1 and 2 for students, and keep this page for checking. Bonus answers vary (1 by 9 = 9, 2 by 8 = 16, 3 by 7 = 21, 4 by 6 = 24, 5 by 5 = 25 square units); check that each perimeter adds to 20.

Page 1 Problems

- Answer: **12 square units**
The Weight Room is 4 squares long and 3 squares wide: $4 \times 3 = 12$.
- Answer: **Locker Room**
It is right below the Weight Room, in the same columns.
- Answer: **120 yards**
Add all four sides: $40 + 20 + 40 + 20 = 120$.
- Answer: **4 square units**
Locker Room is 8 square units and Kicking Nets is 4: $8 - 4 = 4$.
- Answer: **50 square units**
The Practice Field is 10 squares long and 5 squares wide: $10 \times 5 = 50$.
- Answer: **300 yards**
Add all four sides: $100 + 50 + 100 + 50 = 300$.
- Answer: **14 square units**
Split it: a 2×3 piece is 6 and a 4×2 piece is 8.
 $6 + 8 = 14$.
- Answer: **150 yards**
All the way around: $60 + 20 + 60 + 20 = 160$.
Leave out the 10-yard gate: $160 - 10 = 150$.

Quick score

Page 1 problems	_____ / 8
A · Flag Football Field	_____ / 4
B · Measuring Words	_____ / 4
C · Plan New Spaces	_____ / 4
Total	_____ / 20

Skills practiced

Area Perimeter Square units Map scale Rectilinear area
 Multiplication Feet & yards

Teaching tip: In questions 3, 6 and 8, have students write all four side lengths before adding. In C3, both fields have the same perimeter but different areas; ask which one a team would rather practice on.

A · Measure the Flag Football Field

- Answer: **90 ft**
Each yard is 3 feet: $30 \times 3 = 90$.
- Answer: **3 square units**
One end zone is 1 square by 3 squares: $1 \times 3 = 3$.
- Answer: **15 square units**
The playing field is 5 squares by 3 squares: $5 \times 3 = 15$.
- Answer: **21 square units**
Playing field plus two end zones: $15 + 3 + 3 = 21$.

B · Measuring Words

- Answer: **perimeter**
 - Answer: **area**
 - Answer: **square unit**
 - Answer: **rectangle**
- Not used: volume

C · Plan New Spaces

- Answer: **6 yards**
Length plus width is half the perimeter: $30 \div 2 = 15$.
 $15 - 9 = 6$.
- Answer: **32 square units**
The rectangle is 8 squares long and 4 squares wide: $8 \times 4 = 32$.
- Answer: **Field B**
Field A: $8 \times 4 = 32$. Field B: $6 \times 6 = 36$.
36 is more than 32.
- Answer: **240 yards**
Add all four sides: $80 + 40 + 80 + 40 = 240$.