

Locker Room Logic

Be the detective in the locker room. Use the clues to figure out lockers, jersey numbers, shootout order and more. Cross out what can't be true. All teams and players are made up!

Name _____

Date _____

LOGIC TOOLKIT

Clues

read every one
before you start

X = No

cross out what
can't be true

• = Yes

mark what
must be true

One each

one yes per
row & column

			
Ava	☐	☒	☒
Ben	☒	☐	☐
Cole	☒	☐	☐

ONE YES IN EVERY ROW

ROOKIE

- 1 **Ava, Ben and Cole** use lockers **1, 2 and 3** in a row. Ben is in locker 1. Ava is **not** next to Ben. Who is in locker 2?

WORK SPACE

- 2 The **Polar Pucks** goalies wear **#1, #30 and #35**. Maya has the smallest number. Leo's number is bigger than Rosa's. What does **Leo** wear?

WORK SPACE

STARTER

- 3 Four players took shootout shots. **Finn** went first. **Jada** shot before **Omar**, and Omar shot before **Priya**. Who shot **third**?

WORK SPACE

STARTER

- 4 Every **Ice Owls** player wears a helmet. Write **yes, no or can't tell**.
a) Zoe is an Ice Owl. Does she wear a helmet?
b) Sam wears a helmet. Is he an Ice Owl?

WORK SPACE

a _____ b _____

PRO

- 5 **Nate, Ivy and Gus** play goalie, defense and forward (one each). Gus is not a forward or on defense. Ivy never plays in net. Nate is not on defense. What does **Ivy** play?

WORK SPACE

PRO

- 6 The scoreboard shows a pattern of shots on goal: **2, 4, 7, 11, 16, ...** What number comes next? Explain the rule.

WORK SPACE

ALL-STAR

- 7 Four teams. The **Frost Foxes** were not first or last. The **Comets** finished right above the **Glaciers**. The **Ice Owls** finished above the Foxes. Write the standings, 1st to 4th.

WORK SPACE

1 _____ 2 _____ 3 _____ 4 _____

CHALLENGE ★

- 8 **Kit, Ari and Bo** scored **5** goals in all. Kit scored twice as many as Bo. Ari scored one more than Bo. How many goals did each player score?

WORK SPACE

Kit _____ Ari _____ Bo _____

A Jersey Number Grid

Four made-up **Ice Owls** skaters each wear a different number. Use the clues and the grid: × for no, • for yes.

PLAYER JERSEY				
Mia				
Theo				
Jun				
Ruby				

CLUES

- Ruby's** number is odd.
- Jun's** number is odd, too.
- Jun's** number is bigger than Ruby's.
- Theo's** number is bigger than Ruby's.

Mia # _____ Theo # _____
Jun # _____ Ruby # _____

B Shootout Order

Five **Polar Pucks** shooters: **Ella**, **Dev**, **Kai**, **Lulu** and **Max**. Write each name in the order they shoot.

- Kai** shoots first.
- Max** shoots last.
- Lulu** shoots right after Kai.
- Dev** shoots before Ella.

1	2	3	4	5

- Who shoots in the **middle** spot?
- How many players shoot **between** Kai and Max?

C Rule Detective

Read each real hockey rule. Then circle **Yes**, **No** or **Can't tell**.

RULE A player who **trips** someone gets **2 minutes** in the penalty box.

- Rex tripped a player. Does Rex go to the penalty box?

Yes No Can't tell

- Nia is in the penalty box. Did Nia trip someone?

Yes No Can't tell

RULE A goal counts only if the **whole puck** crosses the goal line.

- The puck stopped **half** over the line. Is it a goal?

Yes No Can't tell

- Ollie's shot hit the post and bounced out. Is it a goal?

Yes No Can't tell

BONUS · YOUR TURN

Make up your own puzzle! Pick **3** made-up players and **3** jersey numbers. Write clues so a friend can figure out who wears which number. Can they solve it?

Players _____ Numbers _____

Clue 1 _____

Clue 2 _____

Clue 3 _____

Answer Key (for teachers & parents)

Answers for **Locker Room Logic**, with the reasoning shown where it helps. Print pages 1 and 2 for students, and keep this page for checking.

Page 1 Problems

- Cole** (Ava can't be in 2, so she's in 3)
- #35** (Maya #1, Rosa #30)
- Omar** (Finn, Jada, Omar, Priya)
- a) Yes · b) Can't tell** (other players wear helmets too)
- Defense** (Gus is goalie, Nate is forward)
- 22** (add 2, 3, 4, 5, then 6)
- Ice Owls, Frost Foxes, Comets, Glaciers**
- Kit 2, Ari 2, Bo 1** (Bo 1, Kit 2×1, Ari 1+1; 2+2+1 = 5)

Quick score

Page 1 problems	_____ / 8
A · Jersey Number Grid	_____ / 4
B · Shootout Order	_____ / 3
C · Rule Detective	_____ / 4
Total	_____ / 19

A · Jersey Number Grid

- Ruby #9** (Ruby and Jun get the odd 9 and 17; Jun is bigger)
- Jun #17** (the bigger odd number)
- Theo #22** (must be bigger than 9, so not 4)
- Mia #4** (the number left)

Skills practiced

Logical reasoning Deduction Logic grids
Ordering Patterns If-then rules Careful reading

Teaching tip: Have kids say **why** out loud: "It can't be Ben, because..." Crossing out what's impossible first is the key move. For 4b and C2, talk about why "can't tell" is sometimes the right answer.

B · Shootout Order

- Kai, Lulu, Dev, Ella, Max**
- Dev** (spot 3)
- 3** (Lulu, Dev, Ella)

C · Rule Detective

- Yes** (tripping means the box)
- Can't tell** (there are other penalties)
- No** (the whole puck must cross)
- No** (it never crossed the line)

Bonus · Your Turn

Answers will vary. Check that the clues lead to exactly one answer. If two answers fit, add a clue.