



## Work Place Instructions 4A Tic-Tac-Tock

### Each pair of players needs:

- 2 Tic-Tac-Tock Record Sheets (1 for each player)
- 2 blue 1–6 dice
- 1 green 1–6 die
- 1 white 4–9 die
- 1 student clock

**1** Players record their name and the date at the top of a record sheet and decide in a fair way who goes first.

**2** Player 1:

- Rolls the 2 blue dice and finds the sum of the numbers rolled.
- Tells her partner how she found the sum.
- Sets the hour hand to that number (the sum).
- Rolls the green 1–6 die and the white 4–9 die together and multiplies them to find the product of the numbers rolled.
- Tells her partner how she found the product.
- Sets the minute hand to that number and reads the time aloud.

*Player 1* I got  $2 + 4$  on the blue dice. Four and 2 more is 6, so I have to set the hour hand to 6. Then, I got 3 and 6 with the other dice.  $3 \times 6$  is, let's see ... 6, 12, 18. It's 18. So the minute hand goes on 18, but there's no 18 on the clock.

*Player 2* Right, but remember with minutes, you can use the numbers to count by 5s. So, the 1 is 5 minutes, the 2 is 10 minutes, the 3 is 15 minutes. So, 18 minutes would be between the 3 and the 4.

*Player 1* Oh, right, I remember. OK, the minute hand is at 18 and the hour hand is at 6. It is 6:18.

**3** When players agree on the time, Player 1 looks for a clock on her record sheet that she can fill in. The time must match the description below the clock.

There may be more than one description that matches the time rolled, but a player can fill in only one clock per turn. If there is no clock to fill in, the player must wait until the next turn to fill in a clock.

**4** Player 2 takes a turn, following the directions in Steps 2 and 3.

**5** Players take turns rolling the dice, finding the time, and recording it on their record sheets in an appropriate box. They are trying to fill three clocks in a row. Rows can be horizontal, vertical, or diagonal.

**6** The first player to fill in three clocks in a row on their record sheet wins the game.

### Game Variations

**A** Play for blackout: race to fill all 9 clocks instead of just a row of 3 clocks.

**B** Play with one record sheet instead of two. This version of the game is closer to tic-tac-toe because players can use strategies, along with luck, to block one another.

**C** Make a new game sheet with your own descriptions for each clock. Make sure your descriptions are possible. For example, there is no way get the time 1:47 because you can't add to get 1 or multiply to get 47 with the dice in this game.



NAME \_\_\_\_\_

DATE \_\_\_\_\_



## 4A Tic-Tac-Tock Record Sheet



Fill in this clock if you roll an hour that is even.



Fill in this clock if you roll an hour that is odd.



Fill in this clock if you roll minutes that are between 15 and 30.



Fill in this clock if you roll minutes that are between 30 and 45.



Fill in this clock if you roll minutes that are even.



Fill in this clock if you roll minutes that are odd.



Wild Clock! Fill in this clock anytime!



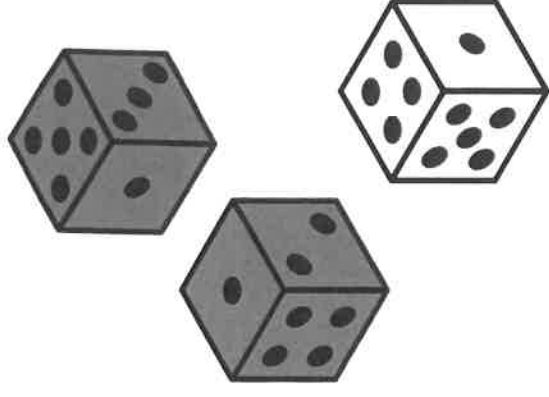
Fill in this clock if you roll a multiple of 2 for either the hour or the minutes.



Fill in this clock if you roll a multiple of 5 for either the hour or the minutes.



I rolled \_\_\_\_\_ and \_\_\_\_\_ with the  
number number  
blue dice. The sum is \_\_\_\_\_, so I  
number  
set the hour hand to \_\_\_\_\_.  
number



I rolled \_\_\_\_\_ and \_\_\_\_\_ with the  
number number  
green and white dice.

The product is \_\_\_\_\_, so I set the minute  
number  
hand to \_\_\_\_\_. My time is \_\_\_\_\_.  
number

I can fill in this clock because \_\_\_\_\_

\_\_\_\_\_

