

# 2.4 TRANSFORMING TEXTBOOK PROBLEMS INTO CURIOUS CHALLENGES KIDS WANT TO SOLVE

Use the **Curiosity Path** to transform the following textbook problem into a curious challenge your students will want to solve.

## CURIOSITYPATH

### ORIGINAL PROBLEM:

A sports center hosts a concert with 18,000 seats. The concert is held for two days, and on the first day there were three quarters of the entrance and on the second day  $\frac{2}{3}$  of the total number of attendees. Which of the two days was attended by the most public?

### CURIOSITYPATH PLAN:

What changes could be made to spark student curiosity?  
How might you gradually share the information in this problem to engage your students?

**Withholding information:** First information:

A sport center hosts a concert in two separate days.

**We make first notice and wonder and anticipation.** Student maybe they will ask for?

Why they make two days concert?

How many people will go each day?

Which is the maximum of people that can go to this concert!!!!

How big is the sports center...

You can now ask to **estimate** which is the total capacity of the sports center?

**Second information**

On the first day of concert they sell 1500 tickets more than in the second day.

Then students should make a **second estimation**.

**Third information.**

On the second day they filled two-thirds of the enclosure.

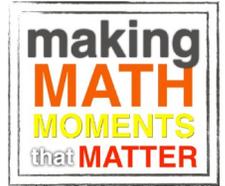
Then students should make a **third estimation**.

---

I will ask students to think about the entrances of the first day of concert. They can think about which part of the sports center do they think that it was filled on the first day or maybe they can guess how many entrances there were on the first day of concert. After that they will try to estimate their last number.

Finally I will tell them that on the first day there were  $\frac{3}{4}$  of the entrance sold out. They can now calculate the total capacity of the sports center.

I will give them a bonus with the visual geometrical solution.



- WITHHOLDING INFORMATION
- ANTICIPATION
- NOTICE & WONDER
- ESTIMATION

---

@mathletepearce

Looking for feedback? Contact us

@MrOrr\_Geek

