THE ADVENTURE:
Get ready for the Kub Kar rally of your dreams! Take your Kub Kar to the next level and make it the fastest one at the rally.

PLAN:
- What do you know about how a Kub Kar works?
- What will you use to build your Kub Kar? Where will you get these things?
- Where will you race your Kub Kar? Are you going to attend a Kub Kar rally?
- What are the rules for your Kub Kar rally? How can you make sure your Kub Kar follows the rules?
- What shape will your Kub Kar be? Make sure it follows the size guidelines for your rally. Collect some old Kub Kars and experiment to discover which shapes race faster.
- How can you reduce air resistance and friction between your Kar and the track?

DO:
- Build a Kub Kar!
- Test different wheels on the track. Which wheels help your Kub Kar go faster? Why do you think some wheels run faster than others?
- How far does your Kub Kar travel? What do you think makes your Kub Kar slow down and then stop?
**REVIEW:**
- What do you know now that you did not know before?
- What forces are acting on your Kub Kar as it goes down the track? What slowed down your Kub Kar? What changes helped it go faster?
- What did you like about this adventure? What did you not like? What would you do differently?
- What elements of STEM were in this adventure? Science? Technology? Engineering? Mathematics?

**ONLINE RESOURCES:**
- Kub Kar Wiki
- Kub Kars and Hotwheels
- Science of the Pinewood Derby
- How to make a fast pinewood derby car

**SAFETY TIP:**
What precautions do you need to take when using tools while building your Kub Kar?