BRIDGE BALANCE

Welcome, engineers! To complete your badge, use both reading and STEM skills to learn how to build a bridge that can hold the weight of an object you choose.

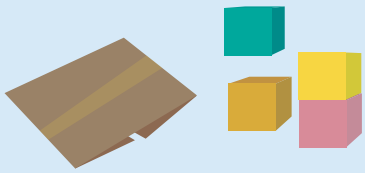
1. Read along with a family member or friend the step-by-step instructions.
2. Use your reading or drawing skills to create your bridge plans.
3. When you are done, be sure to put everything back where you found it and visit **RIF.org/Summer** for more reading fun.

STEP 1: ASK

Early Childhood Camper
"The toy car needs to cross this blue scarf 'river' to get home. How can we build a path that doesn't let him fall into the water?"

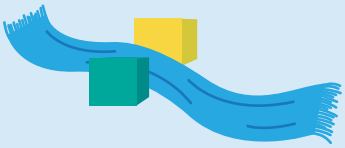
STEP 2: IMAGINE

Early Childhood Camper
"Look at these big blocks and this flat cardboard. Which one should we use to make the road? Do you think the car will fit on this one?"



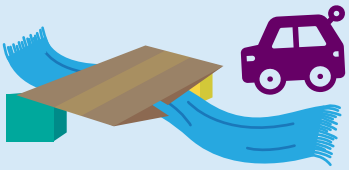
STEP 3: PLAN

Early Childhood Camper
"Where should we put our first block bank? Let's put one on this side and one on that side. How far apart should they be?"



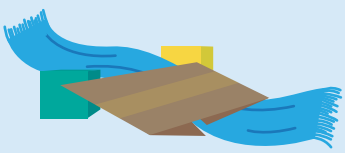
STEP 4: CREATE

Early Childhood Camper
"You're putting the cardboard on top of the blocks! Is it staying? Let's see if the car can drive across without the bridge falling down".

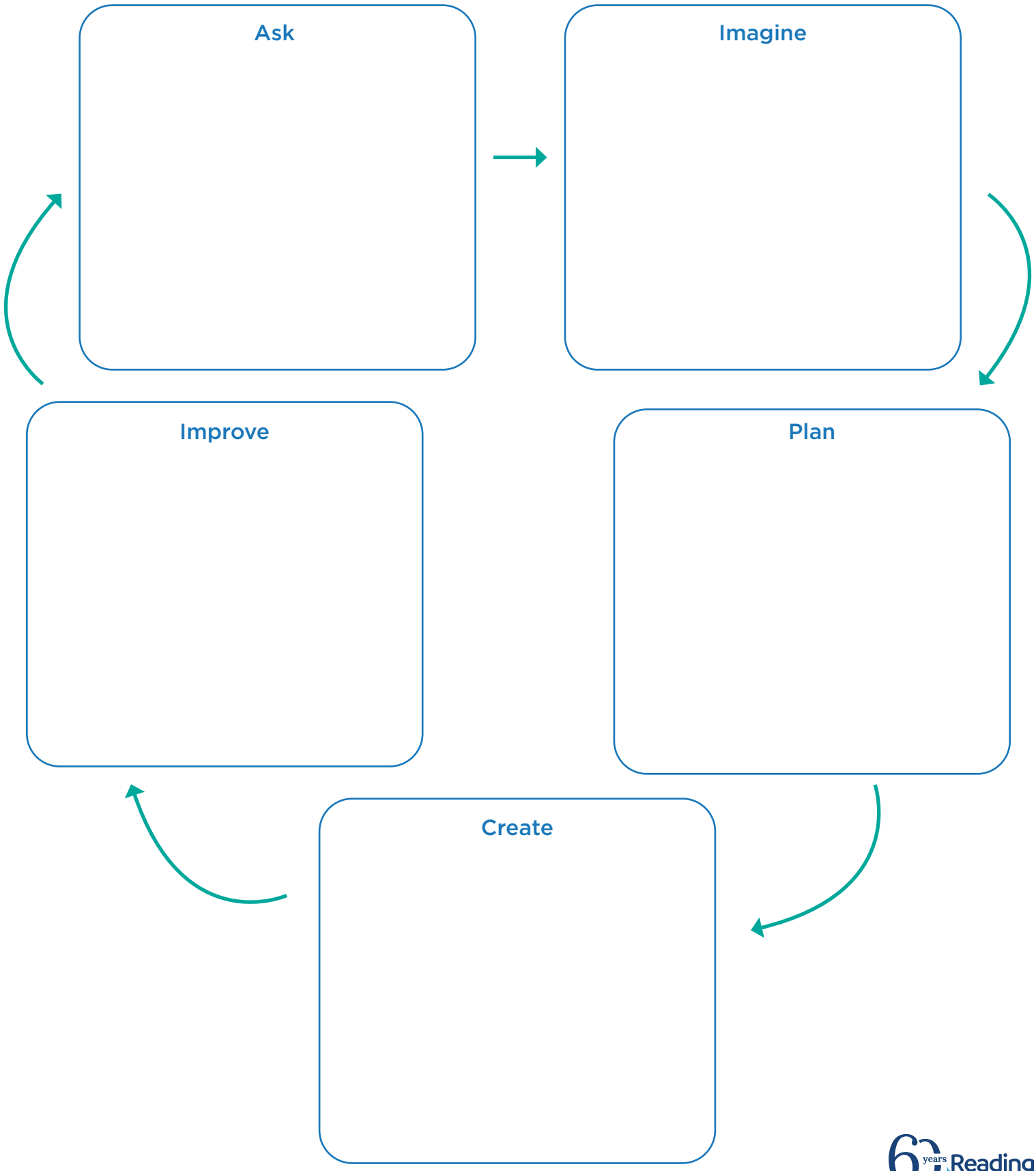


STEP 5: IMPROVE

Early Childhood Camper
"Uh oh, the bridge fell when the bear sat on it! It was too wobbly. How can we make it stay still? Should we move the blocks closer together?"



THE RIF ENGINEERING DESIGN PROCESS



60 years Reading Is Fundamental