**Lower Elementary:**

*Question:* Put the following in order from smallest to largest: a giant grasshopper that weighs 245 pounds, a giant ladybug that weighs 399 pounds, a giant centipede that weighs 150 pounds, and a giant peach that weighs 8 tons.

**Upper Elementary:**

*Question:* Eight friends each eat a pound of peach each day. If they’re eating a giant peach that weighs 8 tons and the pit of the peach weighs half a ton, then how many days will it take for the friends to eat the whole peach?

**Middle School:**

*Question:* A centipede, a glowworm, a grasshopper, and a ladybug all have different favorite foods: curry, hot dogs, noodles, and roast beef. Neither the glowworm nor the grasshopper prefers curry. Neither the centipede nor the ladybug prefers noodles. The ladybug had trouble choosing between hot dogs and noodles as a favorite. The grasshopper almost chose roast beef. Match each bug with its favorite food.

**Algebra and Up:**

*Question:* It takes 13 hours for a flock of seagulls to carry a giant peach 260 miles in windy conditions. If the seagulls are flying into the wind, which is slowing their progress by 5 miles per hour, then how fast can the seagulls transport the peach in still conditions?

**Lower Elementary:**

*Question:* Put the following in order from smallest to largest: a giant grasshopper that weighs 245 pounds, a giant ladybug that weighs 399 pounds, a giant centipede that weighs 150 pounds, and a giant peach that weighs 8 tons.

*Answer:* the centipede, the grasshopper, the ladybug, and the peach

*Solution:* The first thing we need to notice is that even though the peach has the smallest number representing its weight, it’s weighed in tons. A ton is 2,000 pounds, so the peach is by far the heaviest. The smallest is the centipede at 150 pounds, the next larger bug is the grasshopper at 245 pounds, and the largest of the bugs is the ladybug at 399 pounds.

**Upper Elementary:**

*Question:* Eight friends each eat a pound of peach each day. If they’re eating a giant peach that weighs 8 tons and the pit of the peach weighs half a ton, then how many days will it take for the friends to eat the whole peach?

*Answer:* 1,875 days

*Solution:* First, we need to know how many pounds of peach the friends are eating. Since a ton is 2,000 pounds, 8 tons is 16,000 pounds. The peach pit weighs half a ton, which is 1,000 pounds, so the friends eat a total of 15,000 pounds of peach. In total, they eat 8 pounds of peach per day, so we divide 15,000 ÷ 8 to find that it will take them 1,875 days to eat the whole peach.

**Middle School:**

*Question:* A centipede, a glowworm, a grasshopper, and a ladybug all have different favorite foods: curry, hot dogs, noodles, and roast beef. Neither the glowworm nor the grasshopper prefers curry. Neither the centipede nor the ladybug prefers noodles. The ladybug had trouble choosing between hot dogs and noodles as a favorite. The grasshopper almost chose roast beef. Match each bug with its favorite food.

*Answer:* The centipede prefers curry, the glowworm prefers roast beef, the grasshopper prefers noodles, and the ladybug prefers hot dogs.

*Solution:* To solve this problem, we eliminate possible favorites with each clue. We eliminate the curry as the favorite for the glowworm and the grasshopper first, then we eliminate the noodles for the centipede and the ladybug. Next, we know the ladybug prefers either hot dogs or roast beef, so she can’t have chosen noodles or curry. That leaves curry for the centipede. Since the ladybug had trouble choosing between hot dogs and noodles, she can’t have chosen roast beef. So, the ladybug likes hot dogs. We know the grasshopper almost chose (and therefore didn’t choose) roast beef, so the grasshopper’s favorite must be the noodles. The only option left for the glowworm is roast beef.

**Algebra and Up:**

*Question:* It takes 13 hours for a flock of seagulls to carry a giant peach 260 miles in windy conditions. If the seagulls are flying into the wind, which is slowing their progress by 5 miles per hour, then how fast can the seagulls transport the peach in still conditions?

*Answer:* 25 miles per hour

*Solution:* Since the seagulls’ speed is slowed by 5 miles per hour, we can represent their slowed speed as (***x*** – 5) if ***x*** is the speed they fly in still conditions. Since “distance = rate × time,” we can set up this equation:

260 = (***x*** – 5) × 13

When we solve for ***x***, we get 25 miles per hour.