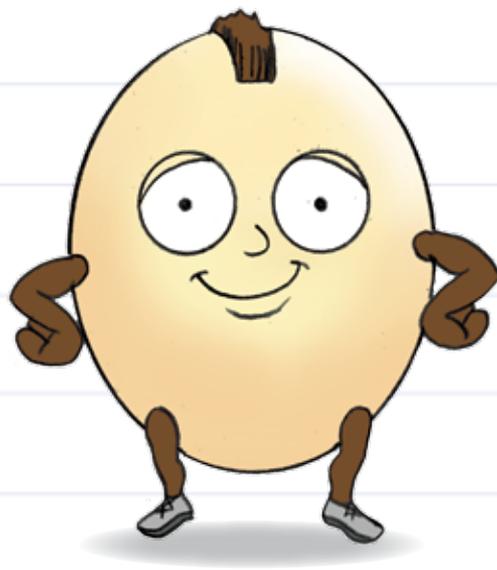


COOLBEAN

The Soybean



SHAWN CONLEY, Ph.D.
with Judy Mannes & Marsha Rehns

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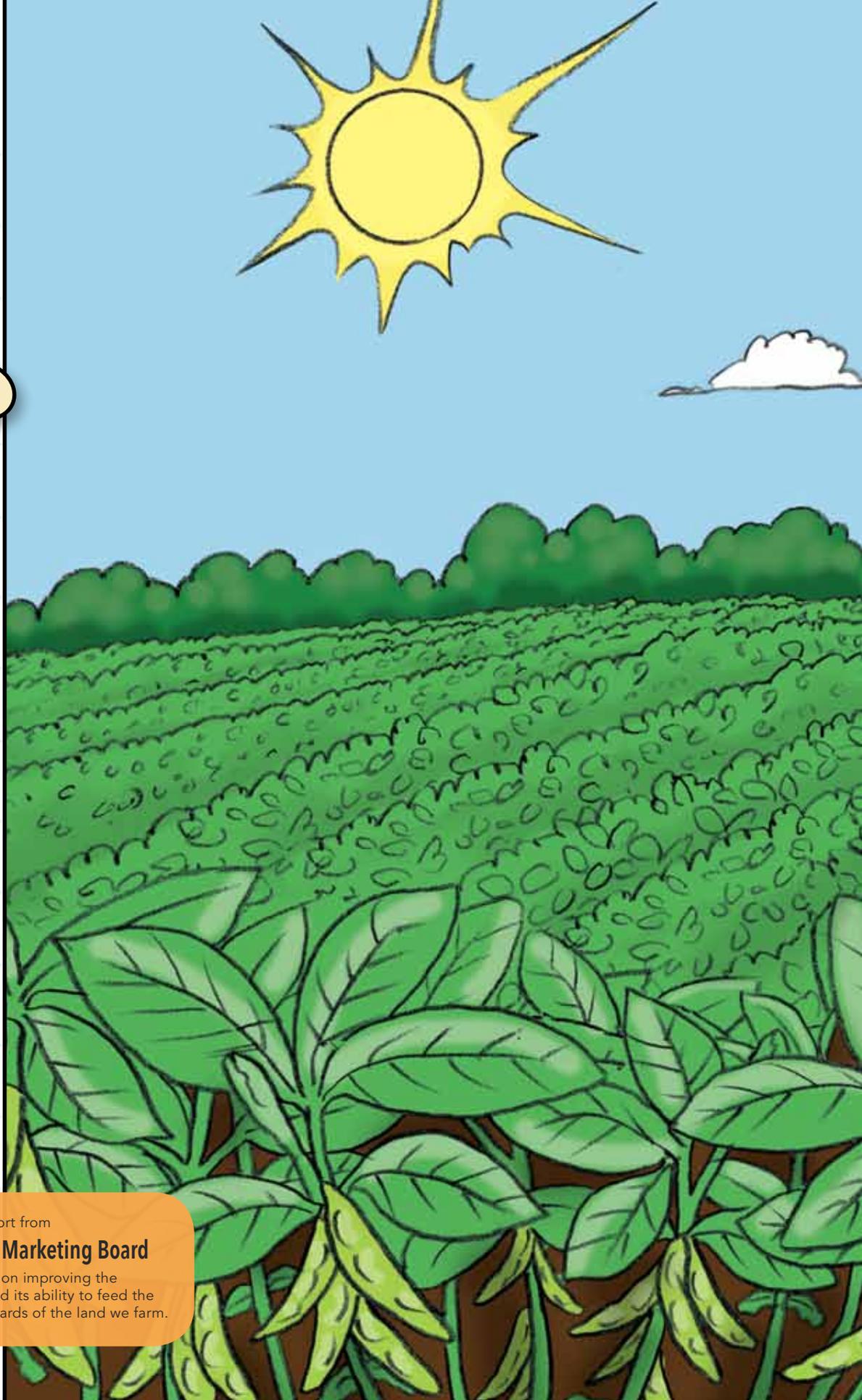
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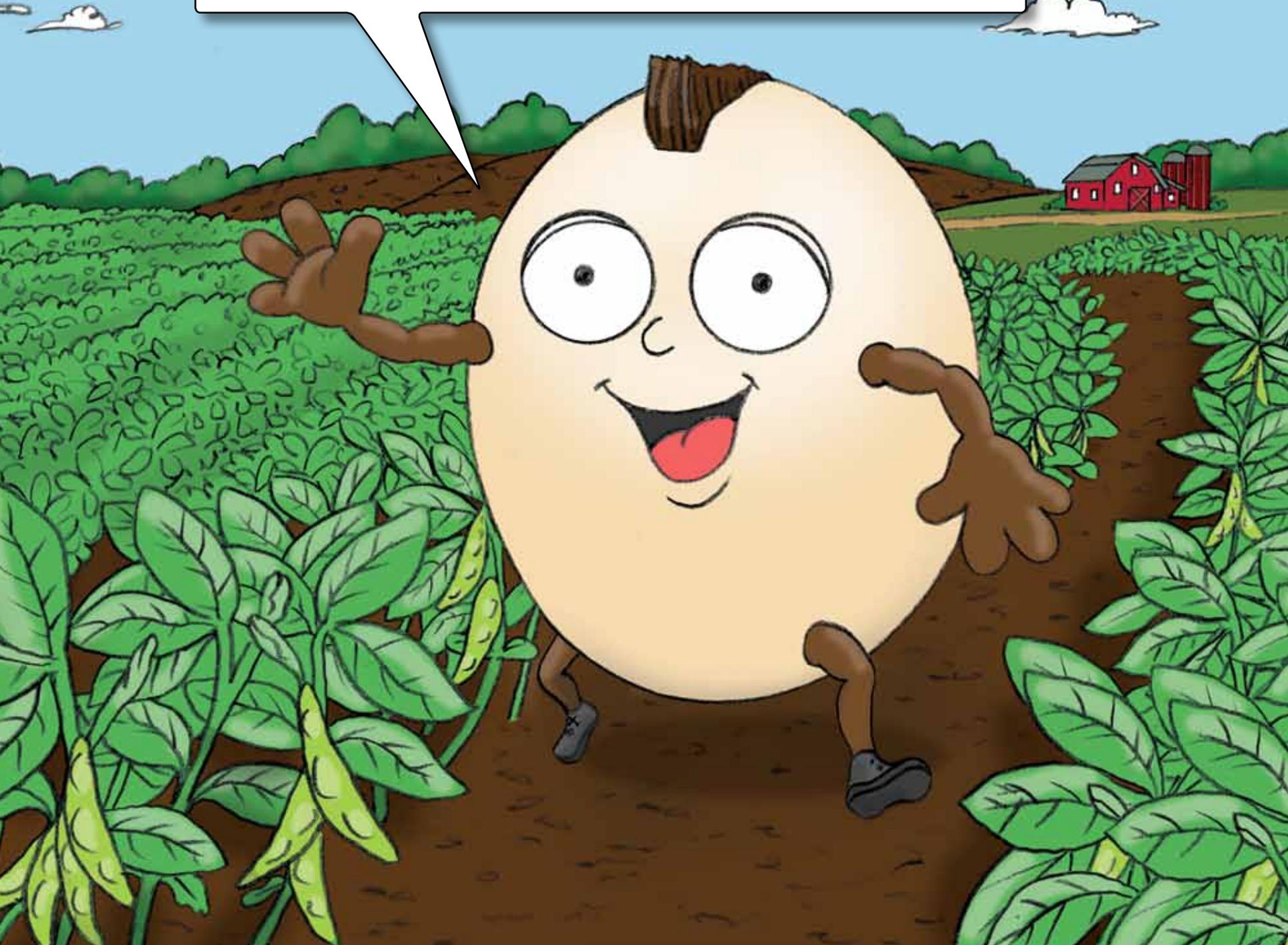
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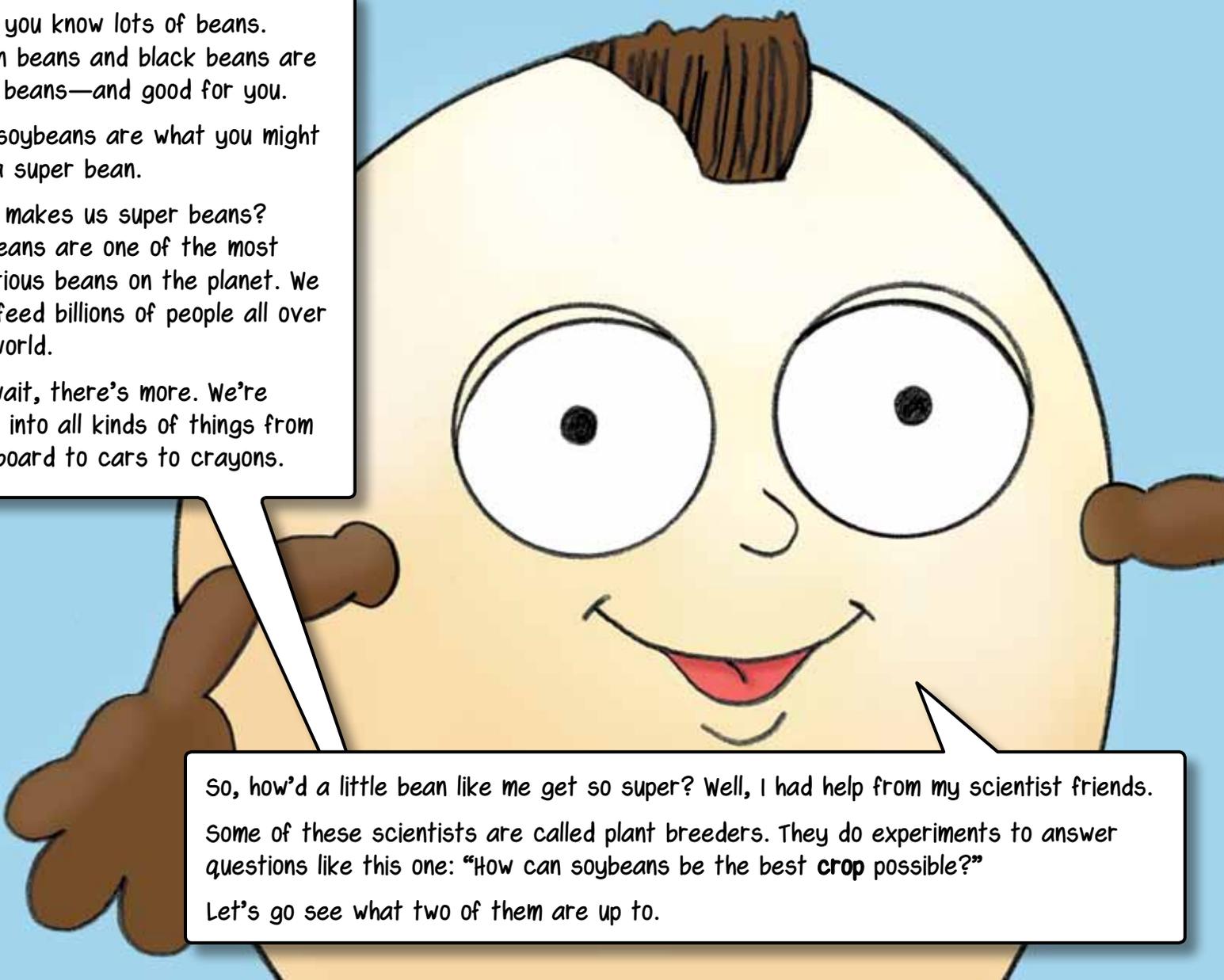
A farmer organization focused on improving the Wisconsin soybean industry and its ability to feed the hungry world while being stewards of the land we farm.



Hey there, it's me...Coolbean, the Soybean!
Ready for an adventure? All right, let's roll!

Watch me get planted. Stick around. Soon, I'll change from a **seed** into a plant. A plant that makes...you got it...more soybeans! Nope, it's not magic. That's what cool beans do. Follow me, and you'll find out what else makes soybeans so awesome!





I bet you know lots of beans.
Green beans and black beans are
good beans—and good for you.

But, soybeans are what you might
call a super bean.

What makes us super beans?
Soybeans are one of the most
nutritious beans on the planet. We
help feed billions of people all over
the world.

But wait, there's more. We're
made into all kinds of things from
cardboard to cars to crayons.

So, how'd a little bean like me get so super? Well, I had help from my scientist friends. Some of these scientists are called plant breeders. They do experiments to answer questions like this one: "How can soybeans be the best crop possible?"
Let's go see what two of them are up to.

CROPS are plants that
people grow for their use.
Most crops become food.
Others are used to make
medicines, fuels, clothes,
and other things.

Think like a Scientist...

Scientists use the **scientific method** to study and learn things. They ask questions and use evidence to find answers. Here are the steps they take:

- Ask a question.
- Observe and gather information (research).
- Come up with possible answers (a hypothesis).
- Experiment to test the hypothesis.
- Observe and record the results.
- Decide if the results prove the hypothesis.

Look! We're in Lori's laboratory. She's working on a new idea for **breeding** better soybeans. She wants to make us beans even stronger and healthier than we are already.

Lori also does experiments in a **greenhouse**, where she grows soybeans. There she can control the light, water, temperature, and **nutrients** to test her ideas.



Making Better Soybeans

Plant breeders study **traits** of soybean plants, like how many beans they produce. Plants, like people, **inherit** traits from their parents. Plants pass traits to their **offspring** in their seeds.

Plant breeders select seeds from parent plants that have the best example of the trait they are trying to improve. They repeat this process many times until they get plants with the specific trait they want.



OFFSPRING are the descendants of parent plants or animals. Children are the offspring of their parents.

Cashen's another plant breeder. He tests new types of soybeans in **fields**. It might take Cashen up to 10 years of testing to come up with a better soybean. Now that's a **REALLY** long time.

Let's get going! I need to catch a ride with Haila to her farm!

