Name: _____ Date: _____

A Vault of Seeds for a Rainy Day

Circle group

Picture this. A disease hits a farmer's wheat. The old kind of wheat is gone from every field nearby. With no backup, that wheat could be lost forever. Seed banks are built so this never happens.

A seed bank is a storage building, often like a vault. Seeds of crops and wild plants are kept there for the future. Workers clean the seeds and dry them with care. They seal them in small packets and keep them in a cold room. Cold and dryness keep a seed asleep. Many kinds can stay alive for years.

Why does this matter? Farmers have bred thousands of varieties of crops. One kind of rice may grow in floodwater. Another may handle dry weather. Each has traits we might need one day, like resistance to a new pest. If farmers plant only a few popular kinds, the rest can vanish.

Seed banks need care too. Stored seeds slowly lose the power to sprout. So workers test samples and plant new batches to make fresh seeds. Then it starts again. Seed banks also share copies with each other. If a flood or a fire hits one place, the variety is still safe somewhere else.

Questions

1. What is a seed bank?

_____

_____

2. What two things help keep stored seeds alive?

_____

_____

3. What is one useful trait a crop might have?

_____

_____

4. Why do workers plant new batches of seeds?

_____

_____

5. Why do seed banks share copies with each other?

_____

_____

6. Why could planting only a few popular kinds be risky?

_____

_____

Words to know

vault: a strong, secure room for keeping valuable things
variety: one particular kind within a larger type of plant
traits: features or qualities that a living thing has
resistance: the ability to avoid being harmed by something
sprout: to begin to grow from a seed

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

A Vault of Seeds for a Rainy Day

Triangle group

Imagine that a disease sweeps through a farmer's wheat and the old kind of wheat is gone from every field in the region. Without a backup, that kind of wheat could be lost forever. Seed banks exist so that this never happens.

A seed bank is a storage building, often built like a vault, where seeds of crops and wild plants are kept for the future. Workers clean the seeds, dry them carefully, seal them in small packets and store them in a cold room. Cold and dryness keep a seed asleep, so many kinds can stay alive for years or even decades.

Why does this matter? Over time, farmers have bred thousands of varieties of crops. One variety of rice may thrive in floodwater, while another may handle dry weather. Each has traits that might one day be needed, such as resistance to a new pest or a hotter climate. If farmers plant only a few popular varieties, the rest can vanish.

Seed banks also need care. Stored seeds slowly lose their power to sprout, so workers test samples and plant new batches every so often to make fresh seeds. Then the cycle begins again. Seed banks around the world also share copies with each other, so a flood or a fire in one place does not erase a variety for good.

Questions

1. What is a seed bank?

_____

_____

2. What two conditions help keep stored seeds alive for years?

_____

_____

3. What is one example of a useful trait that a crop variety might have?

_____

_____

4. Why do workers plant new batches of seeds every so often?

_____

_____

5. Why do seed banks share copies with each other?

_____

_____

6. Why could planting only a few popular varieties be risky?

_____

_____

Words to know

vault: a strong, secure room for keeping valuable things
variety: one particular kind within a larger type of plant
traits: features or qualities that a living thing has
resistance: the ability to avoid being harmed by something
sprout: to begin to grow from a seed

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

A Vault of Seeds for a Rainy Day

Square group

Imagine that a disease sweeps through a farmer's wheat and the traditional variety disappears from every field in the surrounding region. Without a backup, that variety could be lost permanently. Seed banks exist precisely so that such a loss never occurs.

A seed bank is a storage facility, frequently constructed like a vault, in which the seeds of crops and wild plants are preserved for the future. Workers clean the seeds, dry them meticulously, seal them in small packets and keep them in a cold room. Cold and dryness hold a seed in a dormant state, so many kinds can remain alive for years or even decades.

Why does this matter so much? Over the centuries, farmers have bred thousands of varieties of crops. One variety of rice may flourish in floodwater, while another may tolerate dry weather. Each carries traits that might someday be needed, such as resistance to a new pest or adaptation to a hotter climate. If farmers plant only a handful of popular varieties, the remainder can vanish entirely.

Seed banks also require constant care. Stored seeds gradually lose their capacity to sprout, so workers test samples and plant fresh batches every so often in order to produce new seeds. Then the cycle begins again. Seed banks around the world also exchange copies with one another, so a flood or a fire in one place does not erase a variety for good.

Questions

1. What is a seed bank?

_____

_____

2. What two conditions help keep stored seeds alive for years?

_____

_____

3. What is one example of a valuable trait that a crop variety might carry?

_____

_____

4. Why do workers plant fresh batches of seeds every so often?

_____

_____

5. Why do seed banks exchange copies with one another?

_____

_____

6. Why could planting only a handful of popular varieties be risky?

_____

_____

Words to know

vault: a strong, secure room for keeping valuable things
variety: one particular kind within a larger type of plant
traits: features or qualities that a living thing has
resistance: the ability to avoid being harmed by something
sprout: to begin to grow from a seed

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: A Vault of Seeds for a Rainy Day

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: A Vault of Seeds for a Rainy Day

Easier · 199 words · Flesch-Kincaid grade 2.8

1. A storage building where seeds are kept safe for the future.
2. Cold and dryness.
3. Growing in floodwater, handling dry weather, or resisting a new pest.
4. Stored seeds slowly lose the power to sprout, so fresh seeds must be made.
5. If one place is hit by a flood or fire, the variety is still safe elsewhere.
6. One disease or a change in weather could hurt them all, and the others might vanish.

Triangle: A Vault of Seeds for a Rainy Day

This passage · 223 words · Flesch-Kincaid grade 6.2

1. A storage building where seeds are kept safe for the future.
2. Cold and dryness.
3. Growing in floodwater, handling dry weather, or resisting a new pest.
4. Stored seeds slowly lose the power to sprout, so fresh seeds must be made.
5. If one place is damaged by a flood or fire, the variety still survives somewhere else.
6. A single disease or climate change could hurt them all, and the others might disappear.

Square: A Vault of Seeds for a Rainy Day

Harder · 236 words · Flesch-Kincaid grade 8.9

1. A storage facility where seeds are preserved for the future.
2. Cold and dryness.
3. Flourishing in floodwater, tolerating dry weather, or resisting a new pest.
4. Stored seeds gradually lose their capacity to sprout, so new seeds must be produced.
5. If one place is damaged by a flood or fire, the variety still survives somewhere else.
6. A single disease or a change in climate could harm them all, and the others might vanish.