L.5 Risks & Rewards: Answer Key

What is an investment?

*Investment*: Put money or resources into a business or project

What do you need to invest in a garden for it to succeed?

- Seeds
- Water
- Soil
- Garden beds/space
- Human energy
- Time
- Money to buy starts, compost, etc.
- Fertilizers, compost, nutrients

What are risks?

*Risks*: Risks are the potential losses associated with an investment. There are always risks involved when you make an investment in a business or project.

What are some of the risks involved in creating and maintaining a school garden?

- Seeds do not germinate
- Plants dry out or are kept too moist (under/over watering)
- Animals & insects eat produce
- Weather is too hot/too cold, decreasing yield (amount harvested)
- People forget to care for the garden (over winter break or summer vacation)
- The soil is not fertile (not capable of sustaining plant growth)
- The garden is flooded by the first big rain
- The vegetables and fruits grown in the garden are not eaten, so they rot

What are rewards?

*Rewards*: Rewards are the potential gains associated with an investment. There are rewards involved when you make an investment in a business or project.

What are some of the rewards involved in creating and maintaining a school garden?

- Fresh, organic food
- Knowing where your food comes from
- Learning how to grow your own food
- Observing plants and animals in detail
- Experimenting with different nutrients and plant growth
- Collecting insects
- Learning about decomposition
- Inspiring neighbors to grow their own produce
- Building confidence in yourself
Income from enterprise project (using school garden) to reinvest into project and garden

When eliminating risks, you can also eliminate rewards. The following are two examples of techniques to eliminate risks. Do these techniques also eliminate rewards? Which rewards?

1. You decide to use pesticides to prevent insects from eating your produce.
   Does this technique eliminate rewards?
   ☐ Yes ✔

   If so, which rewards does it eliminate?
   Synthetic fertilizers kill beneficial microorganisms in the soil that convert dead human and plant remains into nutrient-rich organic matter. Nitrogen- and phosphate-based synthetic fertilizers leach into groundwater and increase its toxicity, causing water pollution. Fertilizers that leach into streams, rivers, lakes and other bodies of water disrupt aquatic ecosystems.

2. You decide to add synthetic (artificial) fertilizers to add nutrients to your soil.
   Does this technique eliminate rewards?
   ☐ Yes ✔

   If so, which rewards does it eliminate?
   Your produce will no longer be organic, and it could be detrimental to your health and the health of your community.

3. You decide to add organic compost to add nutrients to your soil.
   Does this technique eliminate rewards?
   ☐ No ✔

**Bonus Question:** What are synthetic vs. organic fertilizers?

- Synthetic fertilizers are man-made combinations of chemicals and inorganic substances. They typically combine nitrogen, phosphorus, potassium, calcium, magnesium and other elements in different ratios. Synthetic fertilizers, unlike their organic counterparts, immediately supply essential nutrients to soil.
- Organic fertilizers, like manure and compost, slowly leach essential nutrients into the soil, and improve the soil quality with time.)

**Discussion**

What lessons can you learn from these examples? When reducing the risks involved in an enterprise, do you always gain rewards?

Why is it important to analyze the risks and rewards of different actions taken in the garden? What about in your enterprise project?