Ideas for unpacking knowledge and reflective questioning

Below are some example questions and ideas that could assist teachers to unpack science and integrated learning before, during and after experiencing the Kiwi Kai online tool.

Access the tool via http://kiwikai.nz or http://app.kiwikai.nz.

Before playing Kiwi Kai	
Context: Personal connections	Prompting questions
Students connect to the context and explore the local situation. Teachers provide opportunities to explore prior knowledge and experiences. Teachers provide opportunities to consider the local situation.	Where does your food come from? Who has access to food-growing gardens or maara kai? What do living things need to stay alive and grow? What local farms, orchards, growers or gardens exist in your area? How is local food produced, distributed and consumed? Which foods come from somewhere else?

While playing Kiwi Kai	
Context: Observing, experimenting and considering choices	Prompting questions
Students experiment with ideas and strategies and are exposed to many options of sustainable farming. Students examine available evidence and information to make informed decisions. Teachers can encourage critical thinking, creative thinking, reasoning, problem solving and collaborative practices through questioning and reflecting.	What do you think will happen if you make that choice? (predicting) What happened when you …? Are you on the right track with your choices? Which information is important to consider when making that decision? (use evidence) Which values and knowledge are you relying on when you make a choice? Which actions did you decide on? Why? Which decisions so far have had positive impacts on the health of te taiao (environment), the whenua (land) or tāngata (people)?

Reflecting on the simulation	
Context: Coming to conclusions and developing explanations and solutions	Prompting questions
Students experiment with ideas and strategies and are exposed to many options of sustainable farming. Students examine available evidence and information to make informed decisions. Teachers can encourage critical thinking, creative thinking, reasoning, problem solving and collaborative practices through questioning and reflecting. Students consider systems thinking and sustainable food systems. Students consider real world action.	What causes and effects did you notice in the simulation? How sustainable do you think your farm was? Why? What evidence did you see that your farm was nature friendly and encouraged biodiversity? Where were different types of animals found on the farm? How did they respond to the actions in different habitats? (aquatic species need actions in the wetland or stream, while forest birds mostly need action in the forest) How did you care for people (manaaki tāngata) as well as the land (manaaki taiao) through your choices? What learnings from the simulation can you take to the real world? What foods that are currently coming from elsewhere could be grown in your community? How can you personally contribute to food production and sustainable food systems? Did you achieve the goal of improving biodiversity while growing healthy food and taking into consideration the needs of people? Why or why not?