

Farm energy audit

How does the farm source the energy that it uses?

- How does the farm use energy?
- Could the farm become more efficient and use less energy?
- What opportunities are there to use renewable energy sources?

During your farm tour,

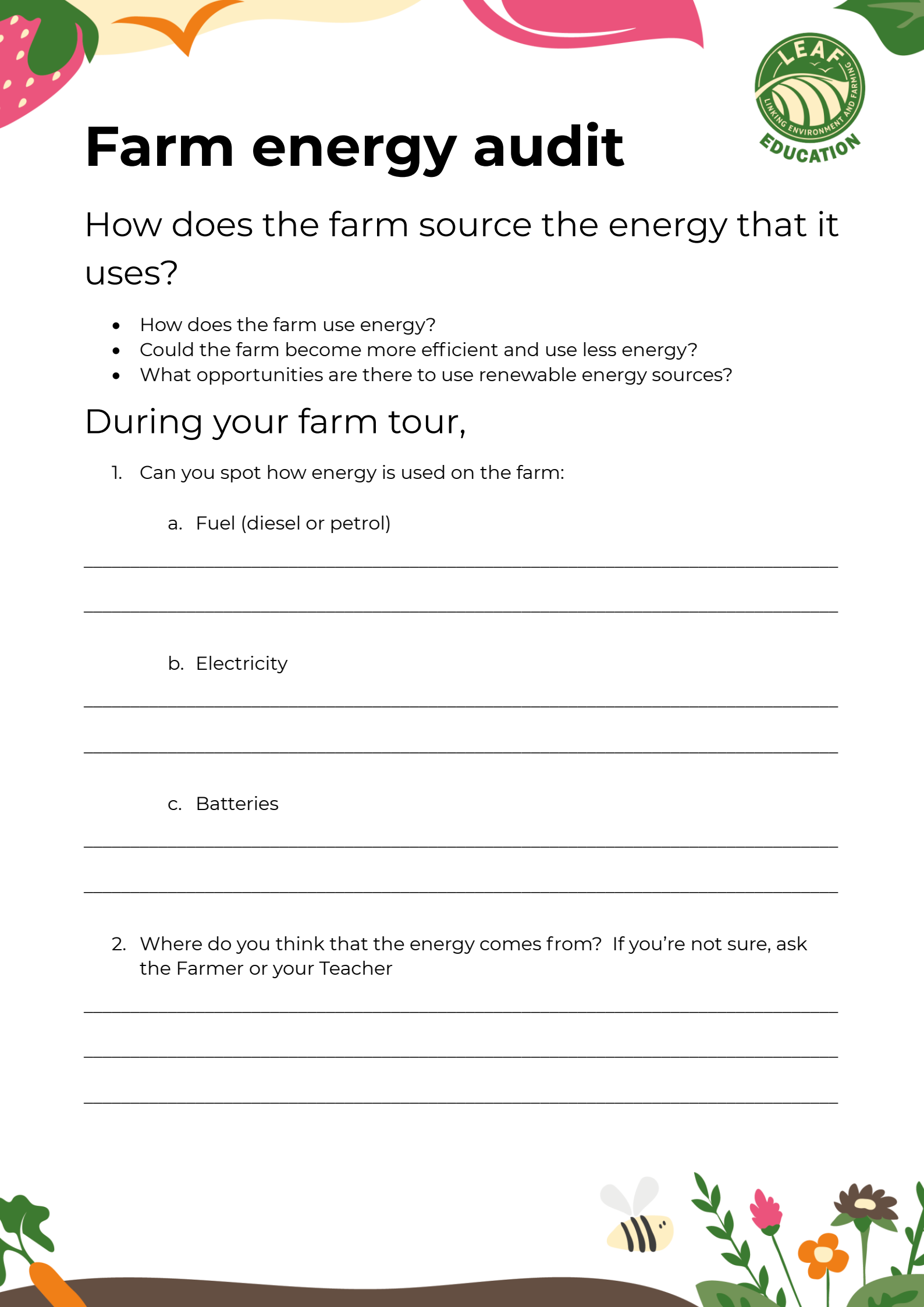
1. Can you spot how energy is used on the farm:

a. Fuel (diesel or petrol)

b. Electricity

c. Batteries

2. Where do you think that the energy comes from? If you're not sure, ask the Farmer or your Teacher



3. Some energy comes from burning fossil fuels (oil, coal and gas) which contributes to climate change; so many Farmers are choosing to use more nature friendly energy. What do you know about these sources of renewable energy ...

a. Solar power



Activity: Use a compass and a map to decide where on the farm would be the best place to site some solar panels. Where would they get the most sunshine?

b. Wind power



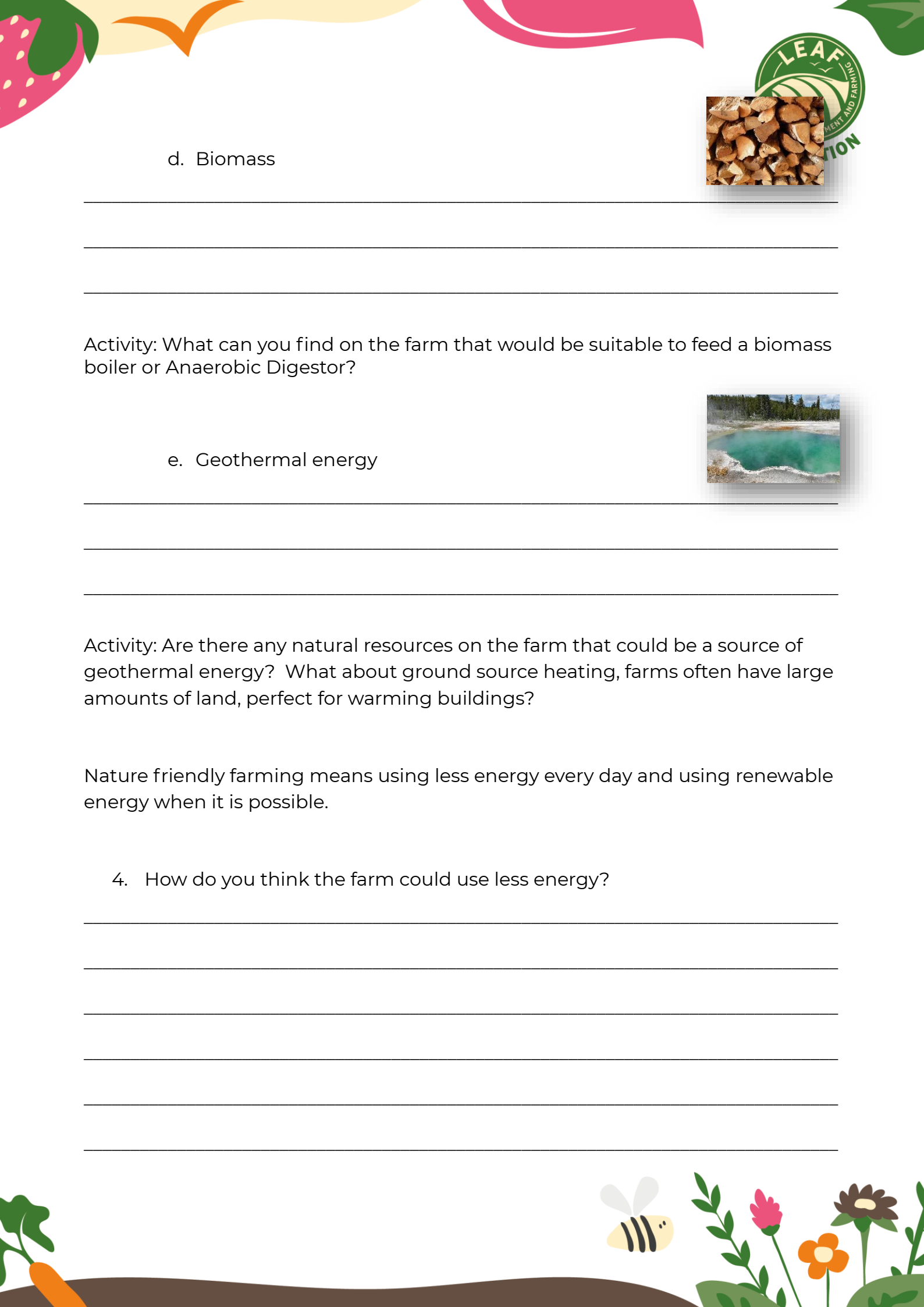
Activity: Design and make a wind turbine, what would you need to consider before deciding where to site it on the farm?

c. Hydroelectric power



Activity: What suitable water sources are there on the farm, can you measure how fast the water is flowing?





d. Biomass

Activity: What can you find on the farm that would be suitable to feed a biomass boiler or Anaerobic Digester?



e. Geothermal energy

Activity: Are there any natural resources on the farm that could be a source of geothermal energy? What about ground source heating, farms often have large amounts of land, perfect for warming buildings?

Nature friendly farming means using less energy every day and using renewable energy when it is possible.

4. How do you think the farm could use less energy?



5. How energy efficient do you think this farm is? Give the farm a score out of 10 and explain your marking.

6. What are the arguments which support a farm growing biomass crops specifically to produce renewable energy?

7. What are the arguments against a farm growing biomass crops specifically to produce renewable energy?

8. So, which is more important growing crops for us to eat, or growing crops to produce energy?

