



Age 5-7



Time

Preparation and growing time - 4 weeks
Room to grow activity - 30 minutes

Before the lesson begins
You should encourage the children to sow their seeds in trays or pots.

Remind the children that the experiment should be 'fair' i.e. that both sets of seed should have the same growth medium (compost/soil) and receive the same amount of water, warmth and light.

Materials

Trays of *radishes* sown close together.
Trays of *radishes* sown far apart.

Extension activities

Dandelions that have gone to seed or another seasonal plant which seeds.

activity 6

Through this activity children can learn:

- that plants need room to grow
- that plants compete for food and resources
- that plants spread their seed away from the parent plant so that the offspring are not competing for resources.

Skills developed:

- observation
- comparison
- prediction

The activity:

- Ask the children to crouch down and get as close to each other as they can. Get the children to pretend to be growing plants by standing up and spreading their arms and legs. The children's arms and legs should become entangled and some children may not be able to move.
- Introduce the children to trays of *radish* plants which have been sown very close together and to trays of plants which have been sown quite far apart. Ask the children to examine each tray of plants and record the differences. The plants sown close together should be much smaller.
- Carefully remove a few plants from each tray and ask the children to examine the roots and record differences. The roots of the plants sown close together should be entangled and some radishes may be fused (odd shaped' fused vegetables such as carrots may be available at local shops or supermarkets). The plants which have been sown quite far apart should have grown well and produced good sized, normal shaped *radishes*.

Room to grow

Key questions:

Q1. Why are the *radish* plants sown close together weaker and smaller than those sown far apart?

Extension activities:

- Compare plants on the outside of the group which have been sown close together to plants on the inside of that group.
- Introduce the children to *dandelions*. Show them how the seeds are spread by the wind and explain that this helps the new plants to grow away from their parent plants so that they do not compete for space or resources. You might like to refer to Teacher worksheet 4.
- Consider a topic on farming. Ask the children the think about how the farmer must plant seeds carefully in order to grow the best crop.

