## Chapter 11

- Normal fertile soil is called (1)\_\_\_\_\_\_. Man-made growing medium for plants is called (2)\_\_\_\_\_\_. If loam is used in a compost, the loam must first be (3)\_\_\_\_\_\_ to kill micro-organisms and pests. Loamless compost lacks loam. Instead it contains peat, sand and (4)\_\_\_\_\_\_.
- Peat and substitutes such as (5) \_\_\_\_\_\_ shells improve a compost's ability to hold (6) \_\_\_\_\_\_. Grit,
   (7) \_\_\_\_\_\_ and perlite improve the (8) \_\_\_\_\_\_ content and let excess water drain away easily.
- 3. Nitrogen (N), phophorus (P) and potassium (K) are major (9)\_\_\_\_\_\_\_ needed by plants (N for (10)\_\_\_\_\_\_, P for (11)\_\_\_\_\_\_ and K for flower and (12)\_\_\_\_\_\_ growth). Different fertilizers contain different (13)\_\_\_\_\_\_ of these minerals. Chemicals needed by plants in tiny amounts are called (14)\_\_\_\_\_\_ elements.
- Some house plants should be watered from above; others from (15)\_\_\_\_\_\_. Plants can be left unattended for a week or two by setting up watering systems using capillary

(16)\_\_\_\_\_ or automatic (17)\_\_\_\_\_.
Compost containing water (18)\_\_\_\_\_ gel does not need
to be watered very often because the gel holds much water.

- Plants only grow well if given a suitable range of temperature. This can be controlled in a greenhouse using a thermostatically controlled (19)\_\_\_\_\_\_. Extremes of temperature can be monitored using a (20)\_\_\_\_\_\_ and minimum (21)\_\_\_\_\_.
- 6. Good ventilation in a greenhouse is important to stop the air becoming too (22)\_\_\_\_\_\_ (damp) and allowing grey mould to attack the plants. The air can be kept fresh using (23)\_\_\_\_\_\_ or a (24)\_\_\_\_\_ controlled (25)\_\_\_\_\_. Relative humidity can be measured using a (26)\_\_\_\_\_.
- 7. Cacti are plants that need direct (27)\_\_\_\_\_\_ and welldrained soil. Ferns need good indirect light and (28)\_\_\_\_\_\_ compost. Foliage plants are grown for their decorative (29)\_\_\_\_\_\_; flowering plants for their attractive flowers. In general both of these groups like good (30)\_\_\_\_\_\_ sunlight and well-watered compost. However detailed needs vary from one type of plant to another.

- 8. The transfer of seedlings from a crowded site to one with more space is called (31)\_\_\_\_\_\_ out. The transfer of a potted plant into a larger container is called (32)\_\_\_\_\_\_ on. The removal of old flowers to encourage a plant to make more flowers is called (33)\_\_\_\_\_.
- 9. An animal that damages a plant is called a pest. An example is the (34)\_\_\_\_\_\_. Such a pest can be killed using chemicals called (35)\_\_\_\_\_\_. A disease is a condition caused by a micro-organism. An example that affects plants is (36)\_\_\_\_\_\_. Fungal diseases can be treated using chemicals called (37)\_\_\_\_\_.
- 10. Young plants can be protected from extremes of temperature using equipment made of (38) or (39) or (39) such as cold frames, cloches and polythene tunnels. Floating (40) can also be used to protect plants from frost.

air airvents aphid below cocoa compost dead-heading fan fertilizer fleece fruit fungicides glass grey mould heater humid hygrometer indirect irrigation leaf leaves loam matting maximum moist nutrients pesticides plastic potting pricking ratios retentive root sand sterilized sunlight thermometer thermostatically trace water

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## Chapter 11

- 1. Normal fertile soil is called loam. Man-made growing medium for plants is called compost. If loam is used in a compost, the loam must first be sterilized to kill micro-organisms and pests. Loamless compost lacks loam. Instead it contains peat, sand and fertilizer.
- 2. Peat and substitutes such as cocoa shells improve a compost's ability to hold water. Grit, sand and perlite improve the air content and let excess water drain away easily.
- 3. Nitrogen (N), phophorus (P) and potassium (K) are major nutrients needed by plants (N for leaf, P for root and K for flower and fruit growth). Different fertilizers contain different ratios of these minerals. Chemicals needed by plants in tiny amounts are called trace elements.
- 4. Some house plants should be watered from above; others from below. Plants can be left unattended for a week or two by setting up watering systems using capillary matting or automatic irrigation. Compost containing water retentive gel does not need to be watered very often because the gel holds much water.
- 5. Plants only grow well if given a suitable range of temperature. This can be controlled in a greenhouse using a thermostatically controlled heater. Extremes of temperature can be monitored using a maximum and minimum thermometer.
- 6. Good ventilation in a greenhouse is important to stop the air becoming too humid (damp) and allowing grey mould to attack the plants. The air can be kept fresh using air vents or a thermostatically controlled fan. Relative humidity can be measured using a hygrometer.
- 7. Cacti are plants that need direct sunlight and well-drained soil. Ferns need good indirect light and moist compost. Foliage plants are grown for their decorative leaves; flowering plants for their attractive

flowers. In general both of these groups like good indirect sunlight and well-watered compost. However detailed needs vary from one type of plant to another.

- 8. The transfer of seedlings from a crowded site to one with more space is called pricking out. The transfer of a potted plant into a larger container is called potting on. The removal of old flowers to encourage a plant to make more flowers is called dead-heading.
- 9. An animal that damages a plant is called a pest. An example is the aphid. Such a pest can be killed using chemicals called pesticides. A disease is a condition caused by a micro-organism. An example that affects plants is grey mould. Fungal diseases can be treated using chemicals called fungicides.
- 10. Young plants can be protected from extremes of temperature using equipment made of plastic or glass such as cold frames, cloches and polythene tunnels. Floating fleece can also be used to protect plants from frost.