K

Sand

K

K

Silt

K

K

Clay

K

Q

Forms free draining soils

Q

Q

Forms soils which can be hard to drain

Q

Q

Forms soils which readily become waterlogged

Q

J

Water runs through it quickly

J

J

Holds on to a moderate amount of water

J

J

Becomes heavy when wet

J

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

10

Largest mineral particle size – between 2mm and 0.06mm in diameter

10

10

Medium mineral particle size – between 0.06 and 0.002mm in diameter

10

10

Smallest mineral particle size – diameter less than 0.002mm

10

9

Feels gritty to touch

9

9

Feels soapy or silky

9

9

Feels smooth when dry and sticky when wet

9

8

Forms soils which are light and easy to work

8

8

Forms soils which are between light and heavy

8

8

Forms soils which are heavy and need well-timed cultivation

8

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

7

Sand

7

7

Silt

7

7

Clay

7

6

Particles do not stick together and cannot be made into a ball

6

6

Particles don't easily hold together – a ball of them breaks easily

6

6

Particles stick together and are easy to make into a ball

6

5

Soils warm quickly in spring but also cool quickly in the autumn

5

5

Soils warm and cool more quickly than clay but less quickly than sand

5

5

Soil takes a long time to warm up in spring and cool down in autumn

5

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

4

Forms soils which cannot hold onto nutrients

4

4

Forms soils which can only hold limited nutrients

4

4

Forms soils which best hold on to nutrients

4

3

No swelling or shrinkage in the soil

3

3

Limited swelling or shrinkage in the soil

3

3

Soil swells when wet and shrinks when dry

3

2

Can be used to make glass

2

2

Derived from deposits from rivers, etc.

2

2

Can be used to make bricks or pots

2

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

A

Sand

A

A

Silt

A

A

Clay

A

K

Living organisms

K

K

Organic matter

K

J

Are responsible for the rotting of dead material

J

Q

Are responsible for recycling minerals

Q

Q

Can increase the amount of air held in some mineral soils

Q

J

Releases nutrients slowly as it rots

J

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

10

Can produce 20-40 tonnes of casts per hectare

10

10

Sticks to soil particles to help form crumbs

10

7

Living organisms

7

9

Examples include insects and bacteria

9

9

Examples include farmyard manure, straw and horticultural peats

9

7

Organic matter

7

8

Bury stones and leaf litter

8

8

Improves water holding capacity of mineral soils

8

6

Convert plant and animal debris to minerals and humus

6

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

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Soil Works

Soil Works

Soil Works

Soil Works

5

Examples include wood lice and earthworms

5

5

Can absorb water and nutrients from the soil

5

6

Creates an open soil structure

6

4

Absorbs water from soil causing it to dry and clays to shrink

4

4

Can make soils warmer – increases heat absorption

4

2

Can create channels for the movement of oxygen and water

2

3

Help to reduce damaging effects of pesticides

3

3

Helps to retain nutrients in the soil

3

2

Are responsible for the dark colour of soils

2

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

A

Living organisms

A

A

Organic matter

A

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

Soil Works

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