Grass

```
Producer
Plant
```

→

Deer

```
Primary consumer
Herbivore
```

→

Fox

```
Secondary consumer
Carnivore
```

→

Fleas

```
Tertiary consumer
Carnivore
```

Fleas
```
Tertiary consumer
Carnivore
```

←

```
Secondary consumer
Carnivore
```
Fox

```
Primary consumer
Herbivore
```
Deer

```
Primary consumer
Herbivore
```
Cow

Bear
```
Primary and secondary consumer
Omnivore
```

←

```
Producer
Plant
```
Berries

Carbon (dioxide) in atmosphere

Plants and animals perform respiration.
$$C_6H_{12}O_6 + 6\,O_2 \longrightarrow 6\,CO_2 + 6\,H_2O$$
*The dead bodies of plants and animals
are respired on by decomposers.*

Plants perform photosynthesis.
$$6\,CO_2 + 6\,H_2O \longrightarrow C_6H_{12}O_6 + 6\,O_2$$

Carbon in plants

*Animals feed on plants
thereby gaining their carbon (glucose).*

Carbon in animals

Plants and animals perform respiration.
$$C_6H_{12}O_6 + 6\,O_2 \longrightarrow 6\,CO_2 + 6\,H_2O$$
*The dead bodies of plants and animals
are respired on by decomposers.*