

***Waste recycling
plant**

- a shredded mixture
- b** ferrous metals
- c air classifier
- d high density materials
- e rotating drum
- f** fine organic materials
- g plastic and paper mixture
- h** wetted mixture
- i paper

Stage 1

Where? hammer mill

What happens? the waste is shredded

Why? to reduce it to a manageable size

How? using rotating steel arms to break up any large items

Stage 2

Where? electromagnet

What happens? ferrous metals are removed

How? by magnetism

Stage 3

Where? air classifier

What happens? high and low density
 materials are separated

How? by a current of air which carries

 low density materials to the top

while high density materials fall to the

bottom

Stage 4

Where? rotating drum

What, happens? the low density portion is screened

Why? to separate out organic materials

Stage 5

What happens? the mixture is wetted/soaked

Why? to give the paper and plastic different densities

Stage 6

Where? air classifier

What happens? paper and plastic are separated

How? by a current of air which carries low density plastic to the top while wet paper falls to the bottom

1 could/can. Could is the better choice because we do not yet recycle most waste although it is theoretically possible.

2 can/could. Can is the better choice because this is the practice in some countries. It is not just a theoretical possibility.

3 could (because we do not do this).

4 can (because this describes something real).

5 can (because this describes the state of affairs at this time).

Stage 2 The shredded waste next passes to an electromagnet where ferrous metals are removed (by magnetism).

Stage 3 The waste then passes through an air classifier where high and low density materials are separated by a current of air which carries low density materials to the top while high density materials fall to the bottom.

Stage 4 After that, the waste passes through a rotating drum where the low density portion is screened to separate out organic materials.

Stage 5 Next, the mixture is wetted to give the paper and plastic different densities.

Stage 6 Finally, the wetted mixture passes through a second air classifier where paper and plastic are separated by a current of air which carries low density plastic to the top while wet paper falls to the bottom

