



MADE HERE · LEVEL 1 · STANDARDS 1 TO 5

Who makes everything?

A visit from people who build factories.

BLUE APPLE

LOOK AROUND YOU

Everything you can touch was made by somebody.



Your bag



Your book



Your bus



Your light

Somebody chose what it is made of. Somebody made the machine that made it. Somebody checked it was good.

A PENCIL IS NOT ONE THING

It takes a forest, a mine and a factory to make one pencil.



This is called a supply chain. Every single thing you own has one.



SO WHAT IS A FACTORY?

**A place where the same thing
gets made again and again,
without mistakes.**

One person cannot make a thousand shoes in a day. A line of people, each doing one small job, can.

LET US TRY IT

The paper hat line

5 children

stand in a line, one behind the other

1 job each

fold, fold, fold, draw, stack

2 minutes

make as many paper hats as you can

Count them

then find the person everybody is waiting for

The slowest person is called the bottleneck. Every factory in the world has one.



THE TIDIEST PLACE YOU WILL EVER SEE

In a good factory, everything has its own home.

If a spanner takes two minutes to find, and you need it forty times a day, you have lost eighty minutes. So everything gets a place, a label and a shape drawn around it.

S**Sort**

throw away what you do not need

S**Set**

give everything a home

S**Shine**

clean it, and find the problems

S**Standard**

the same way every time

S**Sustain**

keep doing it, forever

LET US TRY IT

Give your desk a home

1

Tip it out

Everything from the desk
onto the table.

2

Two piles

Things you used this week.
Things you did not.

3

A home each

Decide where every kept
thing lives. Draw its shape.

4

Photograph

That picture is now the
standard. Match it every
Friday.



HOW DO YOU KNOW IT IS GOOD?

**Somebody has to check.
And somebody has to decide
what “good” means.**

A good biscuit

Round. Not burnt. Not broken. In the packet.

A bad biscuit

Everybody agrees it is bad — but ask three people to say why.

MACHINES GET TIRED TOO

A machine tells you before it breaks. Somebody has to be listening.



A funny noise



Getting hot



Going slow



Making a mess

Your bicycle does the same thing. The chain squeaks before it snaps. Looking after a machine is a real job, and it is called maintenance.



ARTIFICIAL INTELLIGENCE

You can teach a computer to spot a bad one.

Show it a thousand good biscuits and a thousand broken ones. After that it can look at a new biscuit, faster than you can blink, and never get bored at four in the morning.

It never gets tired

It never looks away

**But it only knows
what you taught it**



THE INTERNET OF THINGS

Machines can send messages to each other, all day.

“I am running.”

“I am too hot.”

**“I need more
parts.”**

“I have made 400.”

A person reads all these messages on a screen and decides what to do next. That person has one of the newest jobs in the world.

A FACTORY BORROWS FROM THE EARTH

Everything a factory uses came from somewhere.



Water

It must go back clean



Power

Made from coal, sun or wind



Materials

Dug up, grown or recycled



Waste

Sorted, not just thrown

The best factories use less every year. That is somebody's job too.



WHO WORKS IN A FACTORY?

Not one job. Hundreds.



The person who
plans what to make



The person who
runs the machine



The person who
checks it is good



The person who
fixes it when it stops



The person who
teaches the computer



The person who
looks after the planet

Every one of them started as somebody who was curious about how things work.



MADE HERE
BLUE APPLE INDIA

A horizontal bar composed of eight colored segments: green, purple, orange, yellow, red, cyan, blue, and lime green.

Next time you pick something up, ask who made it.

And then ask whether you could make it better.

A large, faint, stylized graphic in the background showing a plant with leaves and a geometric structure, possibly a building or a bridge.

BLUE APPLE
I N D I A