

**It is a way of thinking**  
**It is making the impossible possible**  
**It is creating solutions to problems in everyday life**

**It is not thinking like a computer**  
**It is not always using a computer as the solution**  
**It is not limiting creativity**

**Attitudes**

**Skills**

# The Computational Thinker:

Attitudes and Skills



Problem solving  
Designing solutions  
Understanding behaviour

## Making mistakes

I can enjoy things that go wrong and learn from them.  
I see mistakes as a normal part of solving problems.

## Pattern recognition

Is this similar to a problem I've already solved? How is it different?  
Which parts of the problem are the same?  
Which parts of the problem are different?

## Perseverance

I don't give up. I'm prepared to keep having a go to see what happens.  
I keep going, even when things seem confusing.  
I'm determined to find solutions

## Decomposition

Can I explain the different parts of this problem and solution?  
How are the parts of the problem connected?

## Imagination

I can look at things in unusual ways.  
I'm ready to consider the impossible.  
Sometimes I leave a problem for a while. A solution might come to me when I'm thinking about something else.

## Algorithm design

What do I need to think about to make this happen?  
What are the steps I will need to do to solve this problem?

## Collaboration

I can use other people's ideas.  
I can share my ideas.  
We can talk together to solve a problem.  
I can teach my peers and they can teach me.

## Abstraction and generalisation

Which is the information I actually need?  
What don't I need to know?  
Have I made this more complicated than I need to?  
Will this work for other things?

