Machine generated alternative text:
What is 
Computational 
Thinking? 
Computational Thinking is a set of skills that underpin learning within the Digital Technologies 
classroom. These skills allow students to engage with processes, techniques and digital 
systems to create improved solutions to address specific problems, opportunities or needs. 
Computational Thinking uses a number of skills, including: Machine generated alternative text:
DECOMPOSITION 
Breaking down problems into smaller, easier parts. 
PATTERN RECOGNITION 
Using patterns in information to solve problems. 
ABSTRACTION 
Finding information that is useful and taking away any information 
that is unhelpful. 
MODELLING AND SIMULATION 
Trying out different solutions or tracing the path of information to 
solve problems. 
ALGORITHMS 
Creating a set of instructions for solving a problem or completing 
a task 
EVALUATION 
Assessing a solution to a problem and using that information again 
on new problems. 

**Coding and Decoding**

**This Challenge draws on questions that require students to write small programs, or use decoding strategies to solve the questions.**

Machine generated alternative text:
Message Service 
Violet wants to send a message to Leo with 
the help of some beavers and some cards. 
She breaks the message into groups of, at 
most, 3 letters on each card. She then gives 
one card to each beaver. 
Violet knows that sometimes the beavers 
get distracted while transporting their 
cards, and they arrive at different times. 
Therefore, Violet also numbers the cards in 
the correct order before giving them to the 
beavers. Leo must then put then back in 
order to read the message. 
Question 
Example: To send the 
message DANCETIME, 
Violet creates these 3 cards: 
DAN 
CET 
IME 
Leo received the 
following sequence of 
cards from the beavers: 
What was the original message that Violet sent to Leo? 

**Solution:**

Machine generated alternative text:
This question 
comes from 
Switzerland 
Answer 
Explanation 
The original message was GETHOCKEYSTICKS after the cards 
are put in numerical order and words are constructed. 
GET 
HOC 
KEY 
STI 
CKS 
Computational Thinking: 
Decomposition 
CSIÅo 
digital 
careers 