

Riley's Magic Toy Box Algo-rhythm



Riley's Magic
Toy Box
Algo-rhythm™

Sample Lesson

Why This Lesson Matters

Algorithms shape much of children's online experiences, but are rarely explained in ways younger learners can understand. This lesson introduces algorithms as simple rules that computers follow, using a story-led approach that helps children connect digital systems to everyday choices.

Learning Outcomes

By the end of this lesson, children will:

- Understand that an algorithm is a set of rules a computer follows.
- Recognise that recommendation algorithms give you more of the same.
- Relate Riley's story to their own online experiences (e.g. YouTube suggesting similar videos).
- Reflect that sometimes it's good to try something different instead of always choosing the same thing.

Lesson Alignment

Computing / Digital Literacy – Introducing algorithms as simple rules that computers follow.

PSHE / Health & Wellbeing – Recognising that too much of the same thing (online or offline) isn't always healthy, and that variety and balance are important.

Literacy & Speaking – Listening to a story, joining in with repeated language, and discussing personal experiences.

Social & Emotional Learning – Identifying feelings of excitement, boredom, and reflection through Riley's journey.

Story Snapshot



One day, Riley finds a sparkly, wiggly box in her room that plays a little song.

**'Hey, I'm Algo-rhythm, pick a toy,
and I'll give you more.
The same kind you liked before!'**



Riley reaches inside and pulls out a shiny toy car.

**'Vroom, vroom!' Riley
cheered.**



Algo-rhythm shakes again. Out came another car... and another!

'Cars, cars, cars!' laughed Riley.



Next, Riley picks a teddy. **PING!**

The box fills with teddy bears. **'This is fun!'** says Riley.

Soon, Riley notices she's seeing less variety...

TEACHING GUIDE



This lesson uses a storybook approach to introduce algorithms in a child-friendly way, helping pupils connect digital concepts with their own experiences and well-being.

Start with the Story, begin by showing the class the ***Riley's Magic Toy Box Algo-rhythm*** presentation.

The storybook style will capture children's imaginations while gently introducing them to the concept of algorithms.

Class Discussion

After the story, ask a few simple questions to help them connect Riley's experience to their own lives:

- Have you ever watched something online, like dancing or slime videos, and then more and more of the same kind of video appeared? Explain that this happens because of an algorithm.
- Why do you think Riley decided to put Algo-rhythm away?

Activity: Worksheet

- Next, hand out the worksheet linked to the story.
- Children will complete the sheet to see how algorithms can give us more of the same thing.
- The activity shows that when you make a choice, the algorithm gives you more of that choice, sometimes so much that it narrows down what you see.

Why This Works (For Schools)

This lesson demonstrates how complex digital concepts can be introduced early through story, discussion, and reflection building understanding that grows year by year rather than relying on one-off online safety messages.

The full lesson includes:

- Storybook presentation
- Teacher Lesson Plan with discussion prompts
- Activity Sheet
- Activity Sheet Answers