

June 17th, 2026

THE 10-MINUTE Experiment

Alice Pistono

Director of Brand & PR @ JoVE

LET'S DO ORIGAMI!

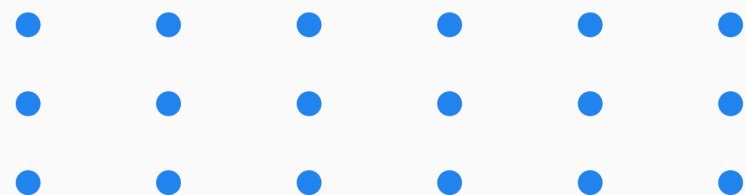
- Ensure the paper is in a square format.
- Position your paper so one corner is facing toward you.
- Create two diagonal folds by bringing opposite corners together one pair at a time. Reopen after each fold.
- You should have a central point where all lines intersect: bring each corner to that point and turn the model over.
- Repeat the previous process on the reverse side, bringing all corners toward the centre.
- Create a horizontal fold through the centre of the model and reopen it, then a vertical fold and reopen it.
- Rotate the model so that one corner points upward.
- Locate the loose flaps created during the previous folds.
- Insert your fingers beneath those flaps.
- Using the existing fold structure, begin pushing the corners inward while simultaneously bringing the centre upward.
- Adjust the folds until the model can repeatedly open and close.

**LET'S DO
ORIGAMI!**



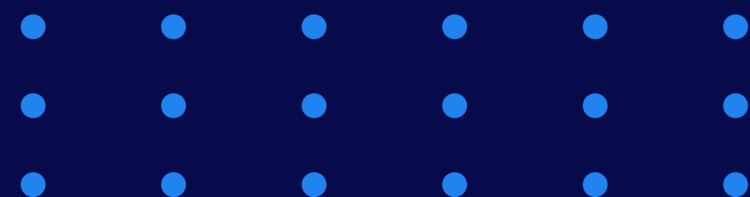
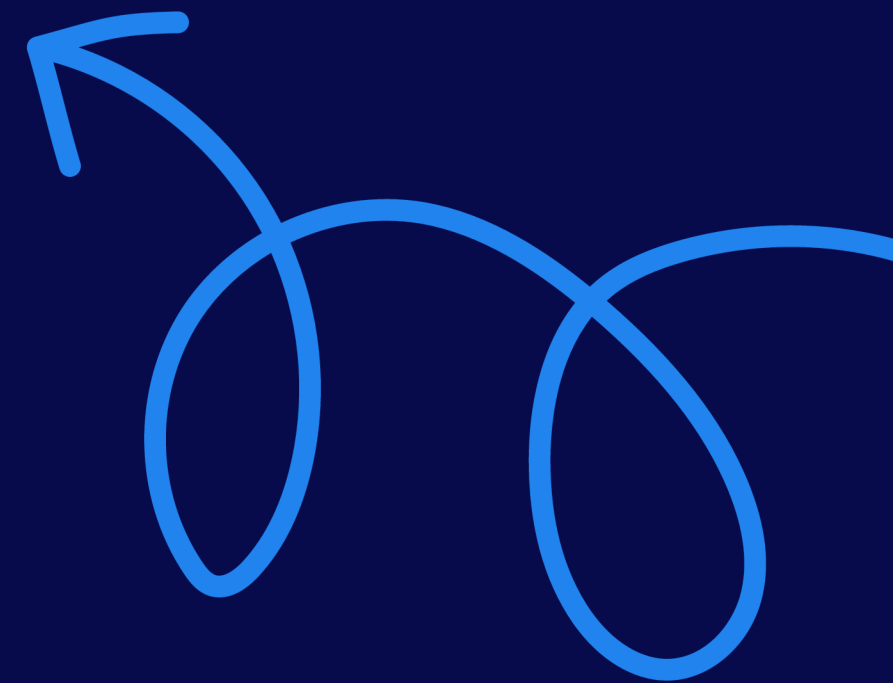
What happened?

Did the task itself change?
Did the objective change?
Did the complexity change?
Why was the second experience easier?



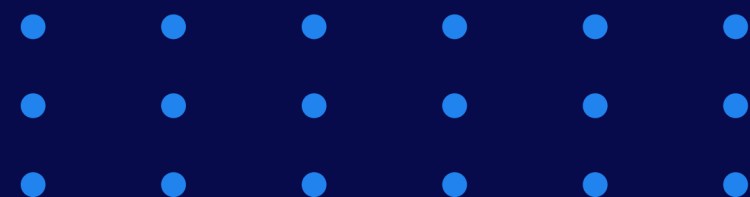
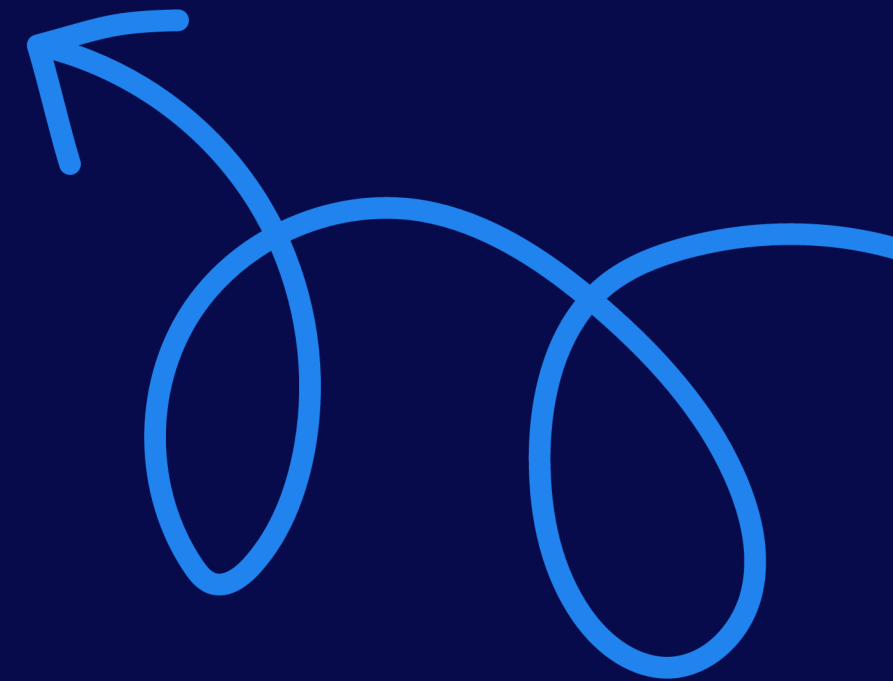
Cognitive Load Theory

- **Working memory has limited capacity:** 4-6 items at once before performance degrades.
- When information is not well-structured, **items compete for attention** instead of building on each other.
- When **load exceeds capacity, comprehension fails:** the design is inefficient.
- **Visualisation reduces load**



Introducing Microlearning

- **One objective at a time**
- **Focused learning experiences**
- **Reduced information density**
- **Retrieval and reinforcement**
- **Building complexity gradually**



Microlearning in Practice

The DNA Replication Fork

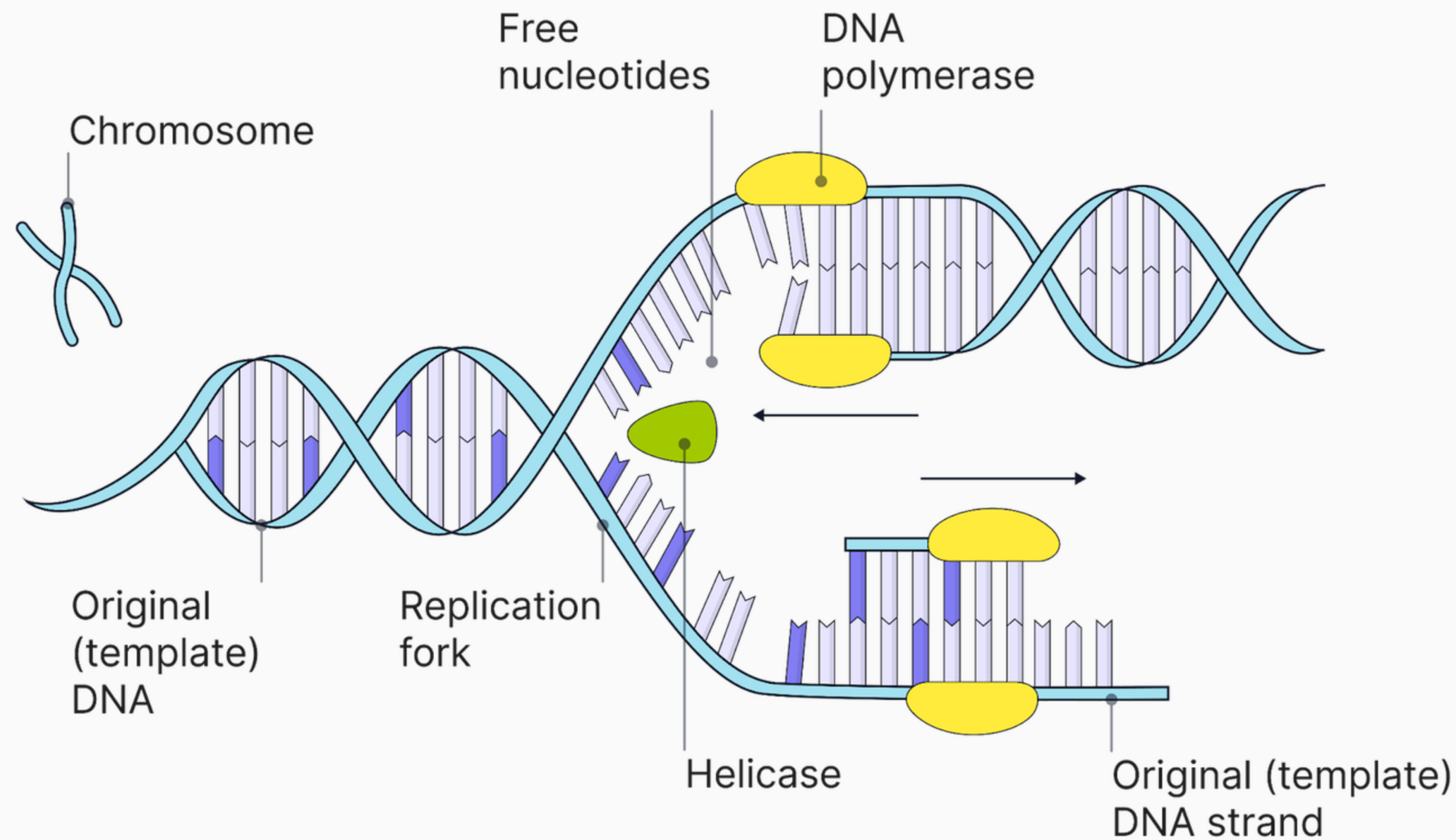


6.4 : The DNA Replication Fork

An organism's genome needs to be duplicated in an efficient and error-free manner for its growth and survival....

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The DNA Replication Fork



- DNA strands separate (helicase)
- Strands stay apart
- Each strand acts as a template
- New DNA is built using DNA polymerase
 - A with T
 - C with G
- Two identical DNA molecules are produced

The DNA Replication Fork

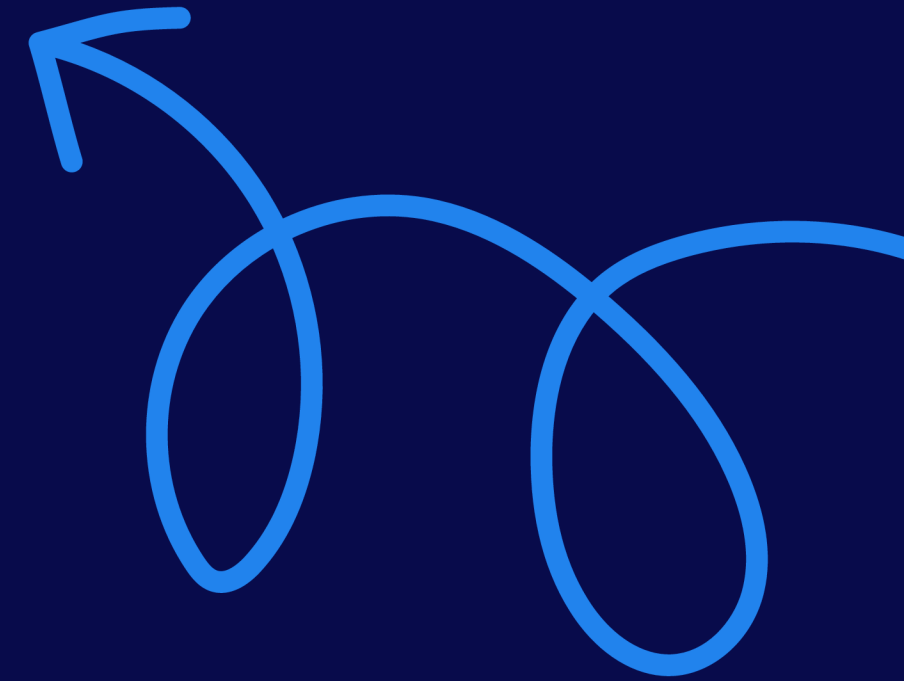
What instructional sequence did we just experience?

Prior knowledge activation
Focused learning content
Immediate retrieval
Short explanation
Application question

Question → Video → Check → Explanation → Apply

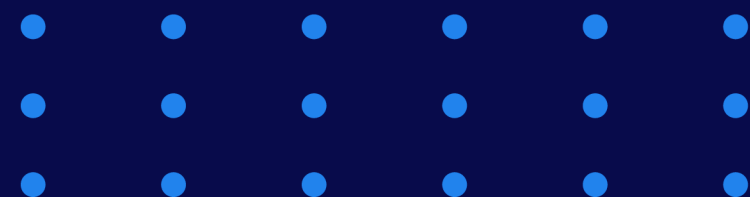


Group Design Challenge



Each group must design a microlearning module with:

- **Learning objective**
- **Activation question**
- **Learning asset** (video, diagram, animation, demonstration, interactive visual)
- **Explanation**
- **Assessment question** that requires application, not recall



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**THANK
QUESTIONS?
YOU!**

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https://www.canva.com/design/DAHLD_-XiRc/09Xun0Hwc1jWliJnSsTc2A/edit

