



Hat Pin Problem Solving

Grade Level/s:
K, 5, 6, 7

Subject/s:
Technologies

Type:
Unit Plan

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Hat Pin Problem Solving

e.g. Goal of the lesson, what students will learn, how it fits into their study, what resources are required etc.

Single Lesson Plan

Hat pin

Task:	Activity:	Resources:
Familiarisation	Year 6/7 students will work through the challenges in the software to familiarise themselves with the tools.	iPad Internet connection Software Starboard (for sharing)
Playdough accessories	Year 6/7s work with receptions to design play dough accessories for the reception children to use in class. Classes will vote on the best designs to print.	iPad Internet connection Software Starboard (for sharing) (Excursion to high school to print)
Lost Hats Problem	Introduce year 6/7s to problem of lost hats and identifying owners. Discuss the design criteria. - stay on but removeable - recognisable - size - safety - colour - how to attach to the hats - where on the hats will it go	iPad Internet connection Software Starboard (for sharing)
Literacy lesson	Receptions are introduced to the hat problem through the reading of a story about a lost hat.	Book (TBA)
Hat attachment design	Year 6/7 students examine the different hats in the school to look at ways they can attach an identifier to them. They work in groups using the hat examples and design criteria to brainstorm possible solutions. The groups choose one of their solutions at the end of the session to work on creating a prototype/3D design.	Hats Starboard for sharing A3 paper Pencils iPads

Class identifier	Year 6/7s work with receptions to design a pin to identify their class hats. Consider - name - colour - unique shape Year 6/7s assist in making sure the designs will be able to be printed properly.	iPads Paper Pencils
Hat attachment design	Year 6/7s share their prototype/design with the class. The class choose 3 that fit the design criteria to test further.	Attachment designs Starboard
Hat attachment design	Year 6/7s test and choose their final design for the hat attachment for printing.	iPads