Machine Learning For Kids :: Teachers' notes	
Worksheet	Headline testing
Activity	Train a computer to recognise headlines from national newspapers.
Objective	<ul> <li>Test the computer's ability to recognise use of language</li> <li>How computers can be taught to recognise the source of writing</li> <li>How machine learning systems are tested.</li> </ul>
Difficulty level	Advanced The Scratch script for this project is long and complex. Most of it is provided in a starter project file, but finding the right places to make changes needs care. The concept of testing and accuracy can require some explanation.
Time estimate	2-3 hours
Summary	Students will collect examples of headlines from national newspapers. These will be used to train a machine learning model based on language in headlines. They will measure the accuracy of this model in a test framework in Scratch.
Topics	text classification, supervised learning, testing
Setup	
Each student will need:	
Print-outs	Project worksheet (download from <u>https://machinelearningforkids.co.uk/worksheets</u> )
Access	Blocks in Scratch scripts are colour-coded, so printing in colour will make it easier for students. Username and password for machinelearningforkids.co.uk
Class account will need:	
API keys	Watson Assistant
	1 workspace per student
	One "Lite" API key is free but can only be used to create 5 workspaces One "Standard" API key can be used to create to create 20 workspaces more detail at: <u>https://github.com/IBM/taxinomitis-docs/raw/master/docs/pdf/machinelearningforkids-apikeys.pdf</u>
Help	
Potential issues	<ul> <li>Some national newspapers use language in their headlines that may not be appropriate for younger children. You may want to tell your class which newspapers to choose if you have concerns.</li> <li>"https://machinelearningforkids.co.uk" is a long URL to type for some children. You may find it easier to set up a bookmark that they can click on instead.</li> <li>General troubleshooting and help at <a href="https://machinelearningforkids.co.uk/help">https://machinelearningforkids.co.uk/help</a></li> </ul>