TEACHERS’ NOTES
Aimed at primary school children, the worksheets in this study guide have been written to accompany the release of the film Jimmy Neutron Boy Genius. The activities within this study guide complement the delivery of many subjects within the National Curriculum, the National Literacy Strategy and the Scottish Guidelines – especially English/ Literacy and Design & Technology. The activities are differentiated by outcome, although teachers may wish to amend the tasks to suit their particular group.

The curriculum grid at the end of the study guide can be used for planning and record keeping. Subject focus areas are also outlined on each page. It is not necessary to have seen the film to complete the worksheets contained within this study guide.

FILM SYNOPSIS
Jimmy Neutron Boy Genius tells the simple story of a boy genius...his robot dog ...battling evil ...rescuing his parents ...saving the Earth ...and returning home in time for dinner. Jimmy's always inventing gadgets to make his life in Retroville more interesting. A boy genius with real kid emotions, Jimmy sometimes fantasises about life on his own. But when the parents of Jimmy's hometown are kidnapped by invading aliens (the dreaded 'Yokians'-a group of hilarious, gross, green, gooey egg yolk creatures with eyes that sit in glass shells), he quickly discovers that things aren't so great when they're gone. Armed with his cool inventions, Jimmy and his buddies - trusty robotic dog, Goddard, his best friend Carl Wheezer and his rival Cindy Vortex-soar to the stars and back in a series of fun adventures.

Certificate:U Website:www.jimmyneutron.co.uk
Meet the Characters

Let’s meet the stars - Jimmy and his friends...

**TASK**
READ THROUGH THE DESCRIPTIONS ON THIS PAGE AND THE NEXT.
- Underline the adjectives or describing words.
- Can you think of other adjectives that mean the same thing?
- How would you describe yourself, your classmates or your teacher using three sentences or less?

**CARL WHEEZER**
Carl is Jimmy’s best friend and a reluctant ‘volunteer’ for testing out new inventions. He is allergic to pretty much everything and is constantly sneezing.

**JIMMY NEUTRON**
Jimmy is a fun, adventurous boy who uses his genius IQ of 302 to invent gadgets to improve his daily life. Jimmy knows a lot about science, but little about life. Jimmy is the smartest in the class and has many trusted friends.

**GODDARD THE DOG**

Jimmy’s mechanical dog is his proudest invention and is made out of sprockets, circuits and widgets. Goddard is able to transform into many items including a telephone, toolbox, CD player and video game controller.

**JUDY NEUTRON**

Jimmy gets his intelligence from his mother, Judy, who is very bright and keeps the Neutron household under control.

**HUGH NEUTRON**

Jimmy’s father, Hugh, is definitely not the reason for Jimmy’s genius. However, he is fascinated by the ‘toys’ that his son makes.
CINDY VORTEX
Cindy Vortex is also a genius and is always there to point out Jimmy’s mistakes. Cindy is one of the ‘cool’ set who teases Jimmy about his wacky inventions.
WHERE DO THEY LIVE?
The characters all live in Retroville a suburban small town in America which looks like a place in the 1950s, hence its name!

Jimmy’s Gadgets

Being a genius, Jimmy is able to invent gadgets out of household items. However, he does not always use his intelligence for worthwhile projects. For example he *invents*:

Inventions are something created by humans that did not exist before. Many of the inventions Jimmy develops have been designed to make his everyday life easier. These include:

**THE BRUSH-O-MATIC**
...for teeth brushing without using his hands

**THE SHOE-BOT**
...to tie his shoelaces for him

**THE SHRINK RAY**
...to reduce the size of things (including Miss Foul, his teacher, to the size of an ant!)

**THE GIRL-EATING PLANT**
...to get rid of girls, especially Cindy Vortex!

**TASK**
Think about an everyday task that you have to carry out that is time-consuming and tiresome. Think about a machine that you could develop to carry out this task for you. Sketch out your initial ideas and plans including the materials needed (preferably everyday equipment you can find around your home or school). Next, decide on the most effective plan and design a blueprint for your item on paper or on screen. What would you invent to make your life easier?

Meet the Yokians

The parents of all the kids in Jimmy’s hometown are kidnapped by invading aliens - the Yokians - a group of hilarious, gross, green, gooey egg yolk creatures with eyes that sit in glass shells.

**TASKS**
- Draw a Yokian from the description you have been given above.

If you had to design some cartoon aliens to be used in a film like Jimmy Neutron Boy Genius, what would they look like? Draw your designs below.
Goddard: a Kid’s Best Friend

Like many parents or guardians, Jimmy's mum and dad wanted him to have his own dog. So, Jimmy decided to invent and build his own cybernetic dog called Goddard!

Goddard is Jimmy’s pet dog and proudest invention. He is not an animal however, as instead of having fur, fleas and a tendency to slobber, he is made entirely of sprockets, circuits and widgets. Goddard can change into really useful gadgets such as a ladder, a telephone, a toolbox, a stereo, a computer screen or a voice simulator.

Which pet would you like to invent to keep you company? (Perhaps a metal monkey, an electronic octopus or a super-intelligent iguana?)

**TASK**

Design your ideal pet, give him or her a name and write a list of all the fantastic feats that he or she can perform.

PG -Parental Guidance!!!

In the film Jimmy Neutron Boy Genius, aliens abduct all of the adults on Planet Earth and the children are left on their own. At first the children celebrate - (no more rules or punishments!!) - but then they realise that they actually miss and need their parents.

**TASKS**

- As a class or small group, make a list of all the benefits of not having your parents or guardians around, e.g.no more bedtime!!
• Now make a list of the disadvantages of not having your parents or guardians around, e.g. emotional support.

• Imagine that aliens have taken all the adults in your area. Write a letter to the aliens to beg them to send the adults who look after you back home. Explain to them why you need your parents or guardians to look after you.

Design a Rocket

Jimmy loves to design weird and wonderful methods of transport to take him to places like school and even outer space! His inventions include:

THE JET PACK
...for handy portable jet propulsion

THE GRAVITY BUBBLE
...to travel by bouncing

JIMMY ’S SPACESHIPS
In the film, Jimmy also designs various spaceships to take him and his school friends up into outer space in order to rescue their parents from the evil aliens, the Yokians.
Scientific Solutions

Jimmy Neutron Boy Genius solves all of his problems using science:

**Problem** - Laboratory security.
**Solution** - Develop comprehensive DNA scanning technology (Vox recorder).
Allows for subject identification and sole access to Lab.

**TASK**
What scientific solutions can you come up with for the following problems:

- **Problem** - Late for school.
  **Solution** - ???

- **Problem** - Children find themselves sitting behind tall people on trips to the cinema.
  **Solution** - ???

- **Problem** - My parents have barred me from using the phone and I need to contact my friends.
  **Solution** - ???

- **Problem** - Whenever I go to put my socks on, they are always inside out.
  **Solution** - ???

Make up some more of your own problems and solutions…
Gotta Blast!!

Sound effects are very important in any movie, but especially in animated movies such as Jimmy Neutron Boy Genius.

**TASK**

Become a sound technician in your own classroom! Using musical instruments or everyday objects, make up the sounds that would go with these actions:

- Jimmy’s dog, Goddard, eating a meal of nuts and bolts.
- The sound of Jimmy’s Shrink Ray shrinking your teacher!
- The sound of Jimmy’s Inter-galactic Spaceship taking off.
- The sound of Jimmy’s Gravity Bubble bouncing along the pavement.

Create a sound setting for Jimmy’s lab. Make sure you include the sound of the noises below (as well as some of your own!)

- radars bleeping
- chemicals bubbling
- pressure gauges rising and falling
- electronic doors opening and closing
- mechanical levers working

**Scientists and Inventors**

Jimmy’s full name is James Isaac Neutron. He has been named after the famous scientist Isaac Newton.

**FACT FILE**

**Invented:** the first reflecting telescope

**Developed:**
- Laws of gravity and motion (that explain how objects move on earth)
- New ideas about light and colour
- An area of Maths called Calculus
FASCINATING FACTS:

• Newton developed his ideas about gravity after seeing an apple fall from a tree. This made him realise that the gravitational force acting on the apple might be the same force acting on the Moon holding it in space.
• Newton’s mother wanted him to be a farmer when he grew up!

Using the internet and your school library, find out what the scientists and inventors mentioned below created:

• George Stephenson (1781-1848)
• Alessandro Volta (1745-1827)
• Alexander Graham Bell in 1876
• Guglielmo Marconi in 1894

When were the following inventions first developed?

• clocks
• printing press
• calculators
• film projector
National Curriculum Guidelines

**ENGLISH GUIDELINES**
Meet the Characters
English KS1 En2 3a
KS1 En3 1a,12
KS2 En2 4c
KS2 En3 1b,7a
NLS Y3,T2 Sentence 2,3
Y4,T2 Sentence 1
PSHE KS1 4c,5b
KS2 5b

Jimmy ’s Gadgets
D &T KS1 1,2a,b 3,4,5
KS2 1,2a,b,c 3,4,5
Science KS1 Sc3 1
KS2 Sc3 1a
ICT KS2 1b,2

Meet the Yokians
D &T KS1 1,2a,b 3,4,5
KS2 1,2a,b,c 3,4,5
Art &Design KS2 1a
NLS Y3,T2 Text 8
Y4,T1 Text 11
Y5,T1 Text 15

Goddard -A Kid ’s Best Friend
D &T KS1 1,2a,b 3,4,5
KS2 1,2a,b 3,4,5

The Making of the Movie
ICT KS2 3a

PG -Parental Guidance!!
English KS1 En1 3
En3 9,11,12
KS2 En1 3
En3 9,11,12
PSHE KS1 1b,2a,e,f 4d
KS2 1a,c 2d,e,f 4a,c,g
NLS Y4,T3 Text 23
Y5,T3 Text 17

**SCOTTISH GUIDELINES**
Meet the Characters
English Language Reading Reading aloud A+
Knowledge about language B+
Writing Knowledge about language B+
PSD Social Development
Inter-Personal Relationships

Jimmy ’s Gadgets
Technology Needs and how they are met A+
Processes and how they are applied A+
Science Materials from Earth A,B
ICT Creating and Presenting
-Graphic manipulation A+

Meet the Yokians
Technology Needs and how they are met A+
Processes and how they are applied A+
Art &Design Expressing feelings, ideas, thoughts and solutions A+

Goddard -A Kid ’s Best Friend
Technology Needs and how they are met A+
Processes and how they are applied A+

The Making of the Movie
ICT Communication and collaboration A+

PG -Parental Guidance!!
English Language Talking Talking in groups A+
Talking about experiences, feelings and opinions A+
Listening Listening in groups A+
Writing Personal/Imaginative writing A+
PSD Social Development
Inter-Personal Relationships
Design a Rocket Competition
D &T KS1 1,2a,b 3,4,5
KS2 1,2a,b,c 3,4,5
Science KS1 Sc3 1
KS2 Sc3 1a
ICT KS2 1b,2

Scientific Solutions
Science KS1 SC1
KS2 SC2
NLS KS2 Text Writing composition
Gotta Blast!
Music KS1 1b,2b
KS2 1b,2b

Scientists and Inventors
English KS2 En1 2,7
Science KS2 Sc1 1a
ICT KS2 1

Design a Rocket Competition
Technology Needs and how they are met A+
Processes and how they are applied A+
Science
   Materials from Earth A,B
ICT
   Creating and Presenting -graphic
   manipulation A+
Scientific Solutions!
English Language
   Imaginative writing A+
Gotta Blast!
Music
   Using materials, techniques, skills and
   media A+
Expressing feelings, ideas, thoughts and
solutions A+
Scientists and Inventors
English Language
   Reading   Reading for information A+