© ATM 2007 • No reproduction except for academic purposes • copyright@atm.org.uk for permissions

fig 1

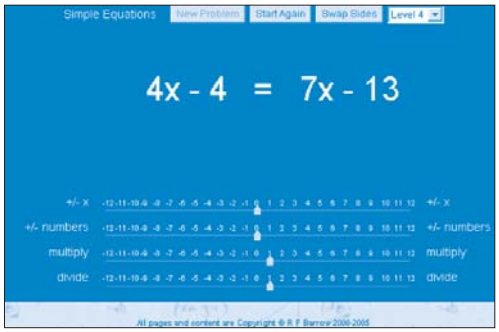


fig 2

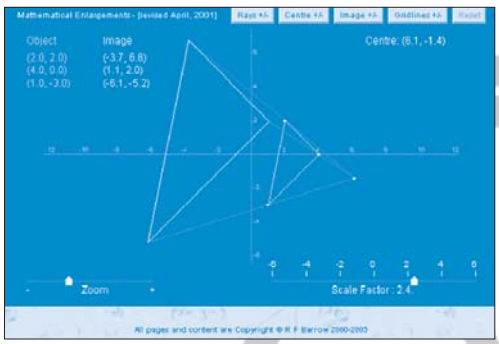


fig 3

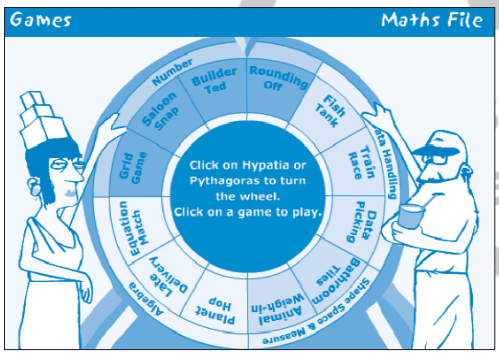


fig 4

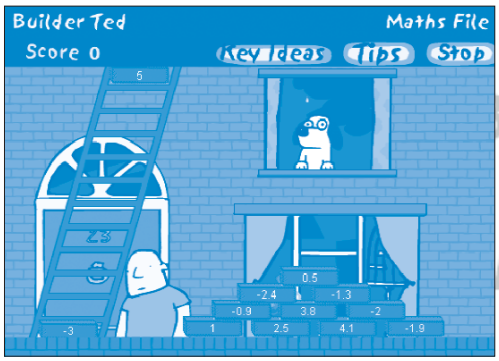
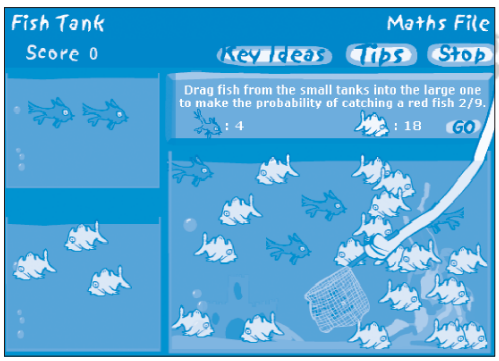


fig 5



Webwatch

Every mathematics teacher seems to have a personal collection of websites they use in the classroom. Would *you* consider sharing your top free websites for the classroom? Colin Foster gets the ball rolling with his selection …

1 www.waldomaths.com

This is a great site with a vast number of interactive programs for ages 11 to 19. I particularly like the solving equations screen (*figure 1*) where pupils can try out doing various operations to both sides of the equation and see what happens. You drag the sliders at the bottom and as soon as you let go both sides of the equation update. Five different levels of difficulty of equation give lots of options.

I also like the dynamic geometry demonstrations, which can be quicker to use than creating your own with software. Enlargements is a typical example (*figure 2*).

2 www.bbc.co.uk/education/mathsfile/gameswheel.html

I use this site a lot with key stage 3 pupils. It contains 12 high quality games (*figure 3*) and can be used individually by pupils or as a class activity with or without an interactive whiteboard. One favourite is 'Builder Ted' for ordering decimals (*figure 4*), where the bricks have to be put in the correct order up the ladder – one mistake and they all fall off. Three different levels allow you to include negative numbers and to vary the number of decimal places. Another good one is 'Fish Tank', where red and green fish have to be dragged into the large tank until the probability of catching a red fish is a certain amount (*figure 5*).

3 www.nrich.maths.org.uk/public/index.php (main site) https://nrich.maths.org/discus/messages/board-topics.html (message board)

Finally the NRICH site is famous as a treasury of puzzles and stimulating material for all ages, but less well-known seems to be the message board where pupils (and sometimes teachers – I've used it myself!) can obtain assistance with mathematical problems or homework at any level. It's well-moderated and staffed with an extremely helpful team of volunteers who are careful not to do the work for you but instead offer support and good suggestions.

Colin Foster is second in the mathematics department at King Henry VIII School, Coventry and is an editor of MT.

Go to **www.atm.org.uk** *for an online version of Webwatch – click on the links instead of typing them in. If you have any good websites to share with us please contact the Editors. Their email addresses are on the contents page.*

ATM is not responsible for the content of (or changes to) any of these websites.

© ATM 2007 • No reproduction except for academic purposes • copyright@atm.org.uk for permissions

The Association of Teachers of Mathematics
for mathematics educators
primary, secondary and higher

This document is copyright ATM and others. Permissions: copyright@atm.org.uk

7 Prime Industrial Park • Shaftesbury St • Derby • DE23 8YB • +44 (0) 1332 346599 • www.atm.org.uk • info@atm.org.uk

The attached document has been downloaded or otherwise acquired from the website of the Association of Teachers of Mathematics (ATM) at www.atm.org.uk

This is the usual copyright stuff - but it's as well to check it out...

Legitimate uses of this document include printing of one copy for personal use, reasonable duplication for academic and educational purposes. It may not be used for any other purpose in any way that may be deleterious to the work, aims, principles or ends of ATM.

Neither the original electronic or digital version nor this paper version, no matter by whom or in what form it is reproduced, may be re-published, transmitted electronically or digitally, projected or otherwise used outside the above standard copyright permissions. The electronic or digital version may not be uploaded to a website or other server. In addition to the evident watermark the files are digitally watermarked such that they can be found on the Internet wherever they may be posted.

Any copies of this document MUST be accompanied by a copy of this page in its entirety.

If you want to reproduce this document beyond the restricted permissions here, then application MUST be made for EXPRESS permission to copyright@atm.org.uk

The work that went into the research, production and preparation of this document has to be supported somehow.

ATM receives its financing from only two principle sources: membership subscriptions and sales of books, software and other resources.

Membership of the ATM will help you through

Now, this bit is important - you must read this

- Six issues per year of a professional journal, which focus on the learning and teaching of maths. Ideas for the classroom, personal experiences and shared thoughts about developing learners' understanding.
- Professional development courses tailored to your needs. Agree the content with us and we do the rest.
- Easter conference, which brings together teachers interested in learning and teaching mathematics, with excellent speakers and workshops and seminars led by experienced facilitators.
- Regular e-newsletters keeping you up to date with developments in the learning and teaching of mathematics.
- Generous discounts on a wide range of publications and software.
- A network of mathematics educators around the United Kingdom to share good practice or ask advice.
- Active campaigning. The ATM campaigns at all levels towards: encouraging increased understanding and enjoyment of mathematics; encouraging increased understanding of how people learn mathematics; encouraging the sharing and evaluation of teaching and learning strategies and practices; promoting the exploration of new ideas and possibilities and initiating and contributing to discussion of and developments in mathematics education at all levels.
- Representation on national bodies helping to formulate policy in mathematics education.
- Software demonstrations by arrangement.

Personal members get the following additional benefits:

- Access to a members only part of the popular ATM website giving you access to sample materials and up to date information.
- Advice on resources, curriculum development and current research relating to mathematics education.
- Optional membership of a working group being inspired by working with other colleagues on a specific project.
- Special rates at the annual conference
- Information about current legislation relating to your job.
- Tax deductible personal subscription, making it even better value

Additional benefits

The ATM is constantly looking to improve the benefits for members. Please visit www.atm.org.uk regularly for new details.

LINK: www.atm.org.uk/join/index.html