

Introducing 3 activity packs designed for nurturing mathematically able and gifted children



- 1 **Mathematical Activities for Younger Gifted Children (4-7 years)**
- 2 **Enrichment Activities for Mathematically Gifted Pupils (7-9 years)**
- 3 **Enrichment Activities for Mathematically Gifted Pupils (9-11 years)**

How to extend and enrich mathematically very able children remains a challenge for most teachers in Infant and Junior Schools. These packs are designed to support teachers with detailed explanations and clear instructions for using specifically designed activities to help make provision for their most able mathematicians.

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Mathematical Activities for Younger Gifted Children (4-7 years)

(67 pages)

AUTHORS

Professor Valsa Koshy and Muriel Chester

CONTENT

A general Introduction which explains the aim of the pack, attributes of younger mathematically promising children and how to meet their needs. It offers guidance on how to develop mathematical processes of problem solving and investigations in children. Advice is also provided on how to use the activities.

Section 1 consists of 19 open-ended activities for investigation. Several levels of challenge are offered. They start at a simple level and lead to more in-depth and complete investigations.

Section 2 provides short problems and games which require extended thinking and systematic working.

Notes and solutions are offered for activities which need extra guidance.

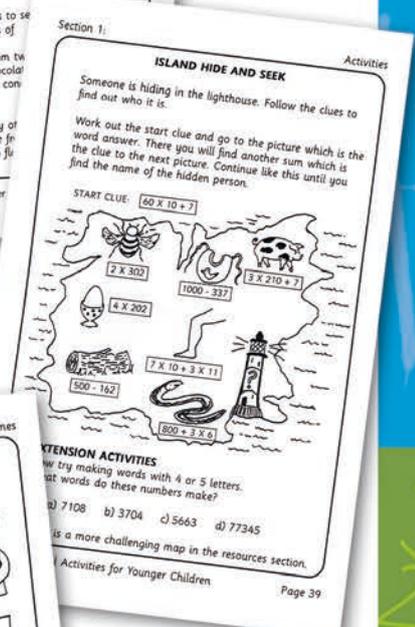
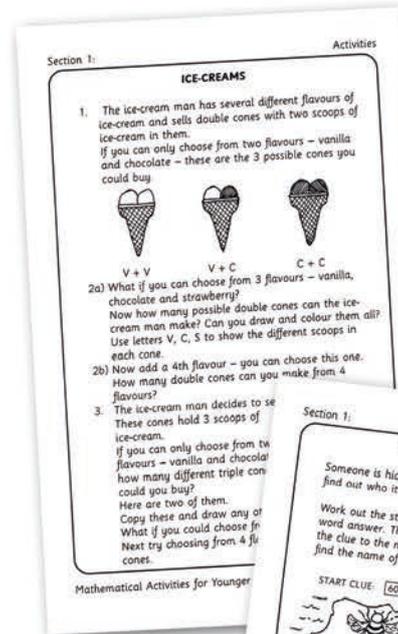
ACTIVITIES

- are set in very motivating contexts.
- address the reader; this can either be the teacher or the children. Children who are good readers can follow the activities with very little help. Teachers can adapt the activities for others.
- offer multi-level outcomes.
- can be used in different contexts: individual, groups or whole class work.
- are photocopiable.
- offer opportunities for developing thinking skills and creativity.

What do Teachers Think?

My more able mathematicians are kept busy doing more challenging maths, not with more of what they already know.

MATTHEW



Enrichment Activities for Mathematically Gifted Pupils (9-11 years)

(Photocopiable pages – CD-ROM included) 194 pages

AUTHOR

Professor Valsa Koshy

The features of the activities in the pack that make it unique and accessible to both teachers and children are:

- They are motivating and give access to advanced content.
- There are multi-level outcomes that can be used in different contexts: individual, groups or whole class work.
- They help to identify mathematical talent through provision.
- Help with the development of higher levels of thinking, questioning, reasoning, problem solving, using and applying.
- Extra resource sheets are provided.
- Offer opportunities for developing thinking skills and creativity.
- Extra extension activities with guidance on how to use the material are also provided.

There is a general Introduction which explains the aim of the pack, attributes of mathematically promising children and how to meet their needs. It offers guidance on how to develop mathematical processes of problem solving and investigations in children. Advice is also provided on how to use the activities. Guidance on setting up portfolios of children's work and proformas for their comments are provided.

The enrichment programme is in three parts; Starters, Extended investigations and Mastermind problems.

Notes and solutions are offered for activities which need extra guidance.

SECTION 1 STARTERS

There are 25 activities in this section. The activities are designed in such a way that they encourage children to:

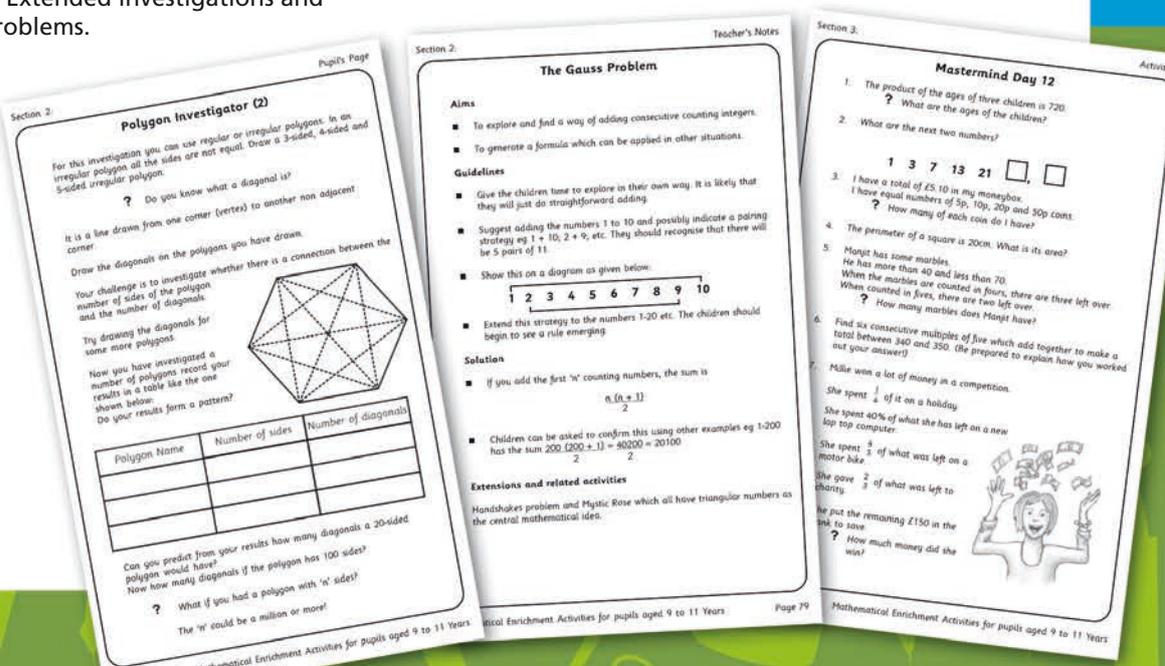
- use mental processes.
- apply logic, reasoning and estimating.
- be engaged in mathematical discussions and sharing of strategies.
- develop problem solving strategies.

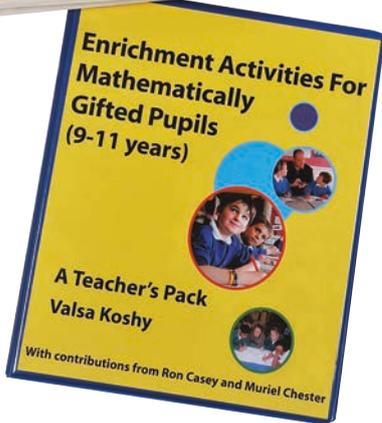
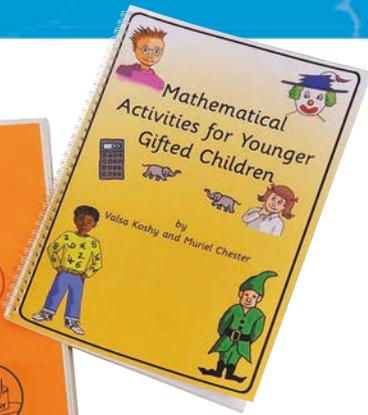
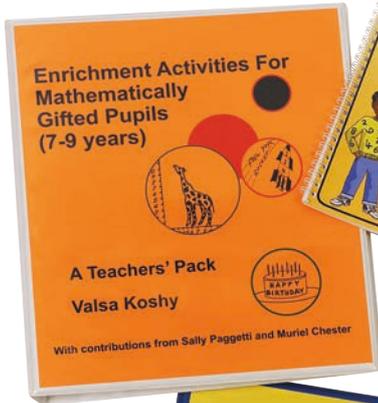
SECTION 2 INVESTIGATIONS

There are 26 activities in this section. There is a teacher's page and a pupil's page for each activity. The teacher's page outlines the main aims of the activity, provides guidelines for its use (if necessary) and at least one solution showing how it has been arrived at. Pupil's pages are designed in a suitable style and level of reading for the children. Most of the activities are open-ended, so it should be possible for all children to solve them at some level. They are designed with multi-level outcomes, so that children can tackle them at some level and enjoy success. The activities may take several hours of work and are suitable for homework.

SECTION 3. MASTERMIND PROBLEMS

There are 30 activities in this section. They involve problem solving and can be used in a number of different ways in school or as homework.





Children's Evaluations

Some of the work was very hard, but it was good to try because I find some maths lessons too easy and when I put my hands up I don't get asked because I know the answers and my teacher wants to be fair to all children.

FAROOK

All three packs were developed by Professor Valsa Koshy, Director of the Centre for Able Children in Education (BACE) at Brunel University, as part of the Centre's work with several Local Authorities and trialled extensively by teachers.

These packs can be used by schools for Professional Development.

Children's Evaluations

Mastermind sessions were great because there was competition, but when we worked in groups, we all pulled together to get the best scores.

ANNIE

What do Teachers Think?

The activities are so well explained, the preparation is done for me. Maths is not my strength.

ALISON

Teacher's Evaluations

I set up an enrichment project every week, lasting 2 hours for the children. I was not sure if they would get bored; on the contrary, time went so quickly and many of the children took the work home.

PETER

Teacher's Evaluations

The use of the activities in the pack helped me to identify mathematical promise in many children who I wouldn't have previously thought were all that good. It was a case of making appropriate provision and helping me identify mathematical talent more effectively. Using this pack has been professional development for me.

GITA

Teacher's Evaluations

I feel that the investigations are so well differentiated that they can be used with most children in my class, not just a few. By doing that I feel I can offer challenging mathematical experiences to a larger group of children.

SANDRA

Order form

MATHEMATICAL ACTIVITIES FOR YOUNGER GIFTED CHILDREN (4-7 YEARS)

£26.00 per pack (Price inclusive of postage and packing in the UK.)

Number of packs

Total cost

Method of payment: Cheque enclosed / Please invoice Organisation (please delete as required)

ENRICHMENT ACTIVITIES FOR MATHEMATICALLY GIFTED PUPILS (7-9 YEARS)

£79.00 per pack (Price inclusive of postage and packing in the UK.)

Number of packs

Total cost

Method of payment: Cheque enclosed / Please invoice Organisation (please delete as required)

ENRICHMENT ACTIVITIES FOR MATHEMATICALLY GIFTED PUPILS (9-11 YEARS)

£79.00 per pack (Price inclusive of postage and packing in the UK.)

Number of packs

Total cost

Method of payment: Cheque enclosed / Please invoice Organisation (please delete as required)

CHEQUES ARE PAYABLE TO THE ELEPHAS CENTRE

Name

Organisation

Address

Telephone

Email

Please send the order form to:

The Elephas Centre, P.O Box 73,
Twickenham, Middlesex, TW1 1XB

Alternatively, you may wish to purchase through the Elephas Centre website (www.elephas.co.uk) to purchase online or find out more about publications to support gifted and talented children.

