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Mad Maths for 10 to 12 year olds Book 3

Stimulating problem solving activities for students aged 10 to 12 years.

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Crazy Chris the carpenter made a wooden car with wooden wheels and a wooden engine that wouldn't go!

"Wouldn't you know it!" Chris sighed.

He took it to the local markets where he sold it to a boy called Chip who saw through it right away and paid him a dollar for it in 15 coins.

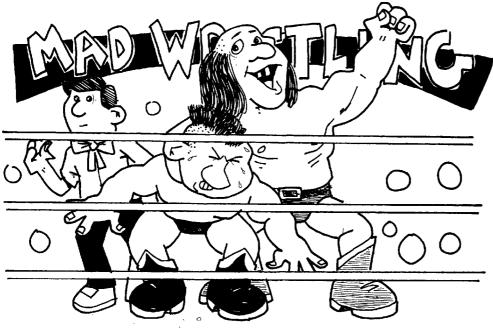
Regulations

| 1. | From what was Chris's car made? |
|----|---|
| 2. | How much did Chip pay for the car? |
| 3. | What coins did Chip give Chris? |
| 4. | If it cost Chris 47 cents to make the car, how much profit did he make? |
| | \$ |
| | What percentage profit did he make? % |
| 5. | If Chip painted the car and sold it for two dollars to his mate Chop, how much profit would he make? (Amount and percentage.) |
| | \$ |

Madness

What form of transport do you like the most? Draw you coming to school in it.

| Name: | | | |
|-------|--|--|--|
| | | | |



In television's Mad Championship Wrestling there are sixteen mad wrestlers entered in a 'Knockout' competition. Each wrestler wrestles one other wrestler in the first match and if they win go on to the next match with the loser 'dropping out'. This keeps happening until only one winner is left.

"We all get a kick out of wrestling," said Jack Hammer.

| ⑬ | PQuestions |
|----|---|
| 1. | How many wrestlers are in the championships? |
| 2. | How many are in the first round? |
| 3. | How many are finished after the first round? |
| | What percentage is this? |
| 4. | How many rounds does it take to find a winner? |
| 5. | If Strangle McGurk lost in the third round what place would he have come? (1st, 2nd?) |
| | |
| 6. | If each wrestler is paid \$100 for a first round win, \$200 for a second round win and so |
| | on, how much would the winner win? |
| 7. | Draw up a list of sixteen good names for the wrestlers. (Don't be sexist!) |
| | |
| | |
| | |
| | |

Madness

Then on the back of this sheet draw up a match ... losers and all!

Draw yourself as a wrestler. Give yourself a killer of a name!

| Name: | | |
|-------|--|--|
| | | |

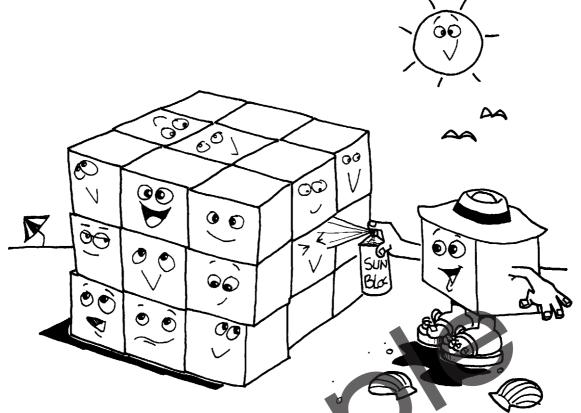
| | Channel 8-7 | |
|--------------|---|---|
| 8:00 | Stragglers Street | |
| 9:00 | Grubby School | |
| 9:30 | Yucky Smells Cooking Show | |
| 10:30 | Cricket: Bashers vs Šmashers. One day match. Morning session. | |
| 12:30 | News & Weather | |
| 12:45 | Afternoon Movie: 'How Itchy My Armpits'. | |
| 2:00 | Cricket: Bashers vs Smashers. Afternoon session. | |
| 4:00 | Stragglers Street | |
| 5:00 | Grubby School | |
| 5:30 5:58 | The Amazing Adventures of an Absolute Ant News Headlines | |
| 6:00 | Yucky Smells Cooking Show | |
| 6:15 | Dr What | |
| 6:45 | Video-ideo Music Show | |
| 7:00 | News | |
| | The Baddies | |
| 7:43 | The 7:43 and 30 Seconds Report | |
| 8:00 | The Six Freds. Comedy. | |
| 9:10 | The Monkeys from Banana State | |
| 10:00 | Late News and Weather | |
| 10:05 | Sports Night: Reviews of the weekend in sport | |
| 10:45 | Big City for Little People | 3 |
| 11:25 | Mad Mad Music until dawn. | |
| 6:20 | Close | |
| | | |

Questions

| •• | What is on charmer of fact relocation |
|------------|---|
| 2. | Which show takes up the most time? |
| | How long? In minutes? |
| 3. | What is the afternoon movie? |
| | For how long does it go? |
| 4. | Which shows are repeated? |
| | |
| 5. | How long is the '7.43 and 30 Seconds Report' on for? |
| 6. | How long in hours and minutes does Channel 8-7 broadcast for? |
| 7 . | Which show goes for only 15 minutes? |
| 8. | Which shows go longer than an hour? |
| | |

Madness

Invent your own TV show. Describe it like they do in the TV guides.



Cewbs are cute little cube shaped aliens who love to be stacked together.

One sunny day at the beach 27 little cewbs stacked themselves into a cute cube. Then along came the Cewb beach patrol and sprayed the outside of the Cewbs with sunblock cream.

"Gee," said the sunblock sprayer, "I bet I have missed a few sides in this operation. I hope no cute Cewbs in the cube get cooked!"

Resolutions

| 1. | How many Cewbs are in the cube shape? |
|----|---|
| 2. | How many Cewbs are in each layer? |
| 3. | How many Cewbs have every side sprayed? |
| 4. | How many Cewbs have two sides sprayed? |
| 5. | How many Cewbs have three sides sprayed? |
| 6. | How many possible sides are there between all the cubes? |
| 7. | How many sides were sprayed? |
| 8. | Which shape (rectangular prism) of 27 Cewbs would get the most sides sprayed by the |
| | beach patrol? |

Madness

Design your own cute little 3 dimensional alien like a Cewb.

| Name: | | |
|-------|--|--|
| | | |

Ms Heavy's maths class have made rings to be sold at the school bazaar. Each ring has two different colours stitched around it. Ms Heavy has six different colours she can use - red, yellow, blue, green, pink and orange, which means she can make lots of different combinations of colours.

Pete Punk found out lots of different combinations of places he can wear the rings.



Questions

| 1. | How many rings is Pete Punk wearing? | |
|----|--------------------------------------|--|
| | | |

| 2. | What are the colours available? | |
|----|---------------------------------|--|
| | | |

| 3. | What are the possible combinations of colours? |
|----|--|
| | |

| | | |
|------|------|--|
| | | |
| | | |
| | | |

| 4. | At \$1.50 each what would Pete Punk owe? | |
|----|--|--|
|----|--|--|

| C . | Ms Heavy's class made | e two aross of rings H | ow many is this? | |
|------------|---------------------------|----------------------------|------------------|--|
| J• | TVIS FIELDY 3 CIUSS ITIUU | e two gross of filigs. I i | ow many is this: | |

| 6. | Pete Punk has four different dyes for his hair - pink, blue, green, and yellow. He | |
|----|--|--|
| | colours it two different colours at once. | |

| How many different combinations can he | have? |
|--|-------|
| • | |

Madness

What would you look like with multi-coloured hair. Draw yourself.