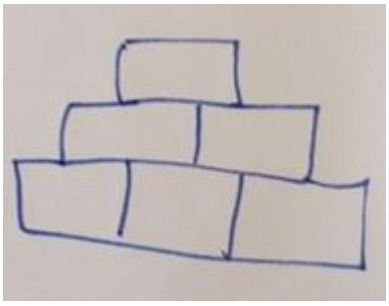
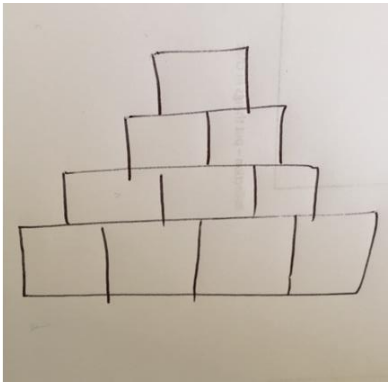
Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

You will need this for the week:

- Paper and pencil
- Printed sheet of pyramids or pyramids drawn on paper for each day

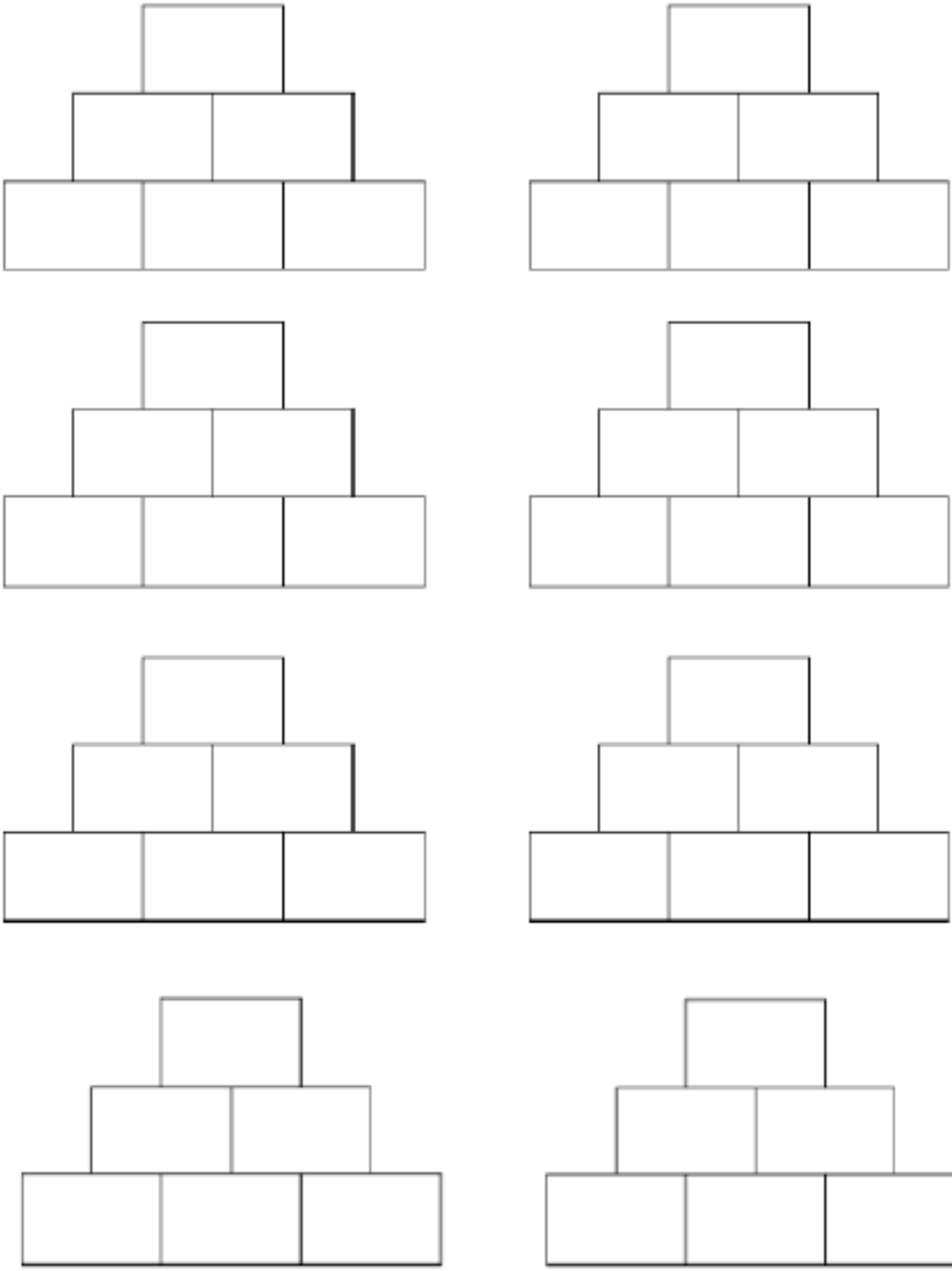




- Keep your pyramids as you work through the week

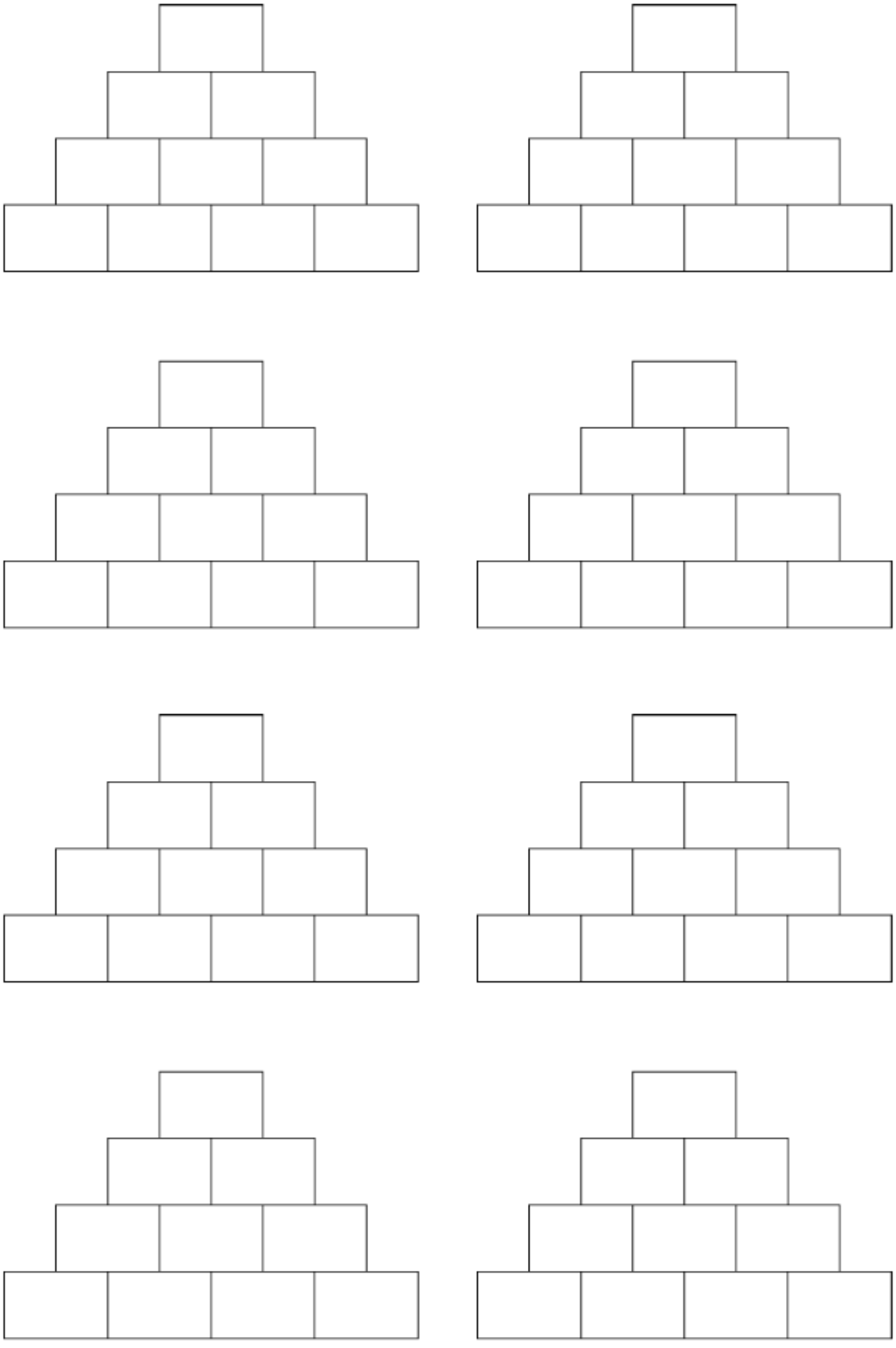
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome



Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome



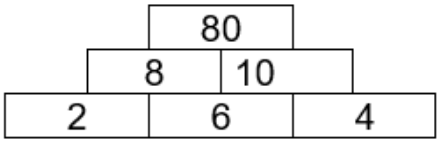
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome

Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

Day 1



- Look at this pyramid. Can you work out how the numbers in the middle layer and top are found starting from the bottom layer?
- You can rearrange the numbers 2, 6 and 4 in the bottom layer, for example 4 2 6, to make a different pyramid. Using the numbers 2, 6 and 4 in the bottom layer, how many different pyramids can you make? How do you know that you have found them all?
- What do you notice about the numbers at the top of each pyramid, are they odd or even?
- Now use these three digits: 5, 3, 7
- How many different pyramids can you make?
- How many different numbers appear at the top of these pyramids? Are these numbers odd or even? Why does this happen?
- What do you notice about the top numbers in all of your pyramids today?
- Can you choose three numbers that make a set of pyramids all with even numbers at the top? And another … and another...
- Explain to someone else, or write down, how to choose the bottom numbers so that you get a set of pyramids all with even numbers at the top.

Notes for adults working with groups of children

- Putting numbers on post its/pieces of paper allows children to rearrange numbers easily

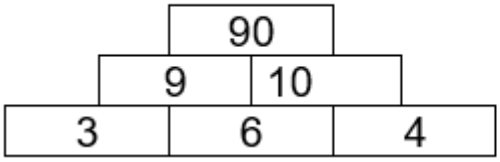
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

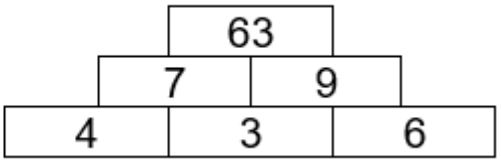
Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome

Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

Day 2





- Look at these pyramids. What do you notice?
- Rearrange the numbers 3, 6 and 4 in the bottom layer, so that you have a set of 6 different pyramids.
- What do you notice about the numbers at the top of these pyramids?
- Choose three numbers and make another set of six pyramids so that you have both odd and even numbers at the top. Do this again…and again…
- Explain to someone else, or write down, how to choose the bottom numbers so that you get a set of pyramids with both even and odd numbers at the top.

Notes for adults working with groups of children

- Putting numbers on post its/pieces of paper allows children to rearrange numbers easily

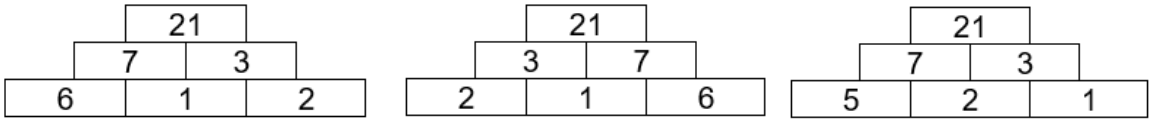
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome

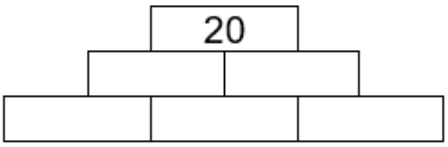
Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

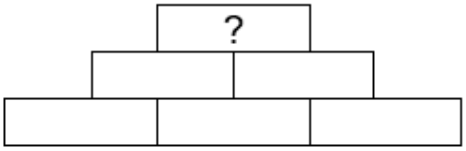
Day 3



- Look at these pyramids; they all have 21 at the top but the bottom layers are not always the same numbers. Can you make other pyramids with 21 at the top?
- How many different pyramids can be made with 21 at the top?



- How many different pyramids can be made with 20 at the top?
- Which number at the top produces more pyramids, 20 or 21? Why?



- Choose a number to go at the top to give to someone else so that they can produce even more pyramids than you did for 20.
- Explain to them, or write down, why you chose this number.

Notes for adults working with groups of children

- Putting numbers on post its/pieces of paper allows children to rearrange numbers easily

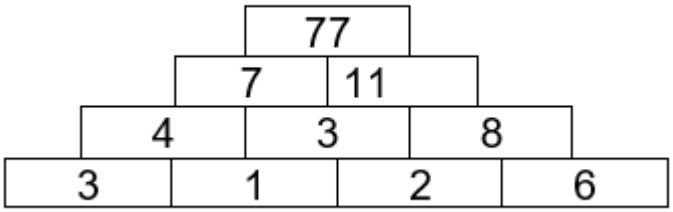
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome

Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

Day 4



- Look at this pyramid. Can you work out how the numbers in the middle layers and top are found starting from the bottom layer?
- How can you rearrange the numbers in the bottom layer to get the largest number at the top? What about the smallest number?
- What do you notice about the centre numbers of the bottom layer?
- Choose any four of your own numbers for the bottom layer and make a pyramid. Using the same numbers make another pyramid… and another … and another…
- Explain to someone else, or write down, how to arrange a set of four numbers in the bottom layer in order to get the smallest number at the top. Now explain how to get the largest number at the top.

Notes for adults working with groups of children

- Putting numbers on post its/pieces of paper allows children to rearrange numbers easily

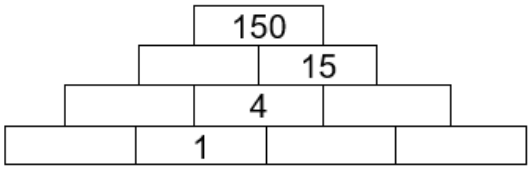
Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

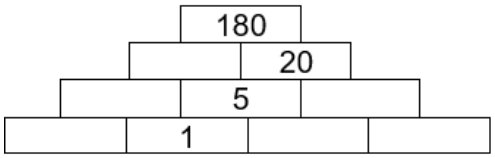
Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome

Number Pyramids Revisited Y5/6

Multiplicative and Additive Reasoning

Day 5





- Look at these pyramids. Fill in the missing numbers. Where is a good place to start?
- What do you notice?
- Create your own missing number pyramid for someone else to solve.

Notes for adults working with groups of children

- Putting numbers on post its/pieces of paper allows children to rearrange numbers easily

Email: LDP-SchoolImprovementTeam@babcockinternational.com
Website: www.babcockldp.co.uk/improving-schools-settings/mathematics

Tweet pictures of work referencing @BabcockLDPmaths with the hashtag #BabcockMathsAtHome