

Year Review Materials - Assessment

This booklet provides a set of assessment activities - one for each year from Year 2 to 6. The assessments target a topic that the students will have learned in the previous year.

Review for Year 2's - Time to the Hour & Time to the Half Hour

Review for Year 3's - Time to the Quarter Hour

Review for Year 4's - Mental Computation Test 1

Review for Year 5's - Mental Computation Test 1

Review for Year 6's - Mental Computation Test 2

Looking for Foundation / Year 1 review materials?

A wonderful array of assessment materials for early years concepts can be found at

www.center.edu/NEWSLETTER/newsletter.shtml

The site has a lot of excellent content including blackline masters to go with the chapters, but the assessment materials I like can be found in the "Teacher Reference Cards" section.

More about Year Review:

Further free materials on teacher planning and year-start review can be found in the "A Guide to Teacher Planning" and "Quick Curriculum Guides" documents

Available on teacherspayteachers.com/Store/Dr-Paul-Swan and www.drpaulswan.com.au

#4 Year Two (Number)

The Australian National Curriculum Says:
Explore the connection between addition and subtraction

What this means
The child can explain all these parts are related,

	9	
5		?

e.g.: $5 + 4 = 9$, $5 + ? = 9$, $9 - ? = 5$ etc.

Activity Idea
Flashcards: Write the three parts of an addition / subtraction fact on a diagram (as above). Cover one part and ask what is missing and all the related facts.




Teaching at Home - Parent Guide www.drpaulswan.com.au

#15 Year One (Stats & Probability)

The Australian National Curriculum Says:
Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays

What this means
Can be in the form of a simple display / drawing.
Descriptions: Which has more / less / most / least and counting the number of items displayed.

Fruit in the Bowl

		
Apples	Bananas	Oranges

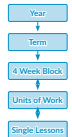
Activity Idea

- Make a simple graph on lollies in the pack etc.

Teaching at Home - Parent Guide www.drpaulswan.com.au

Quick Curriculum Guides

A Guide to... TEACHER PLANNING



- 1 The Year**
Get an overall feel for the Year level(s) you will be teaching. Consider also that with various interruptions you may only have 28-30 effective weeks in the year.
- 2 The Term**
This guide contains a term planner. It's recommended that Term 1 begins with a review of the previous year, some assessment and the establishment of routines. Term 2 includes report writing as does Term 4, so it's always a good idea to reserve some easier topics or revision for these periods.
- 3 The 4-Week block**
The 4-week block is block of time within the term filled with a collection of lessons that connect to each other. Using 4-week blocks helps in planning, making connections and review/assessment.
- 4 The Unit of Work (series of lessons)**
Some topics will require several lessons in order for students to best understand a concept. **Curriculum Threads Charts** can assist in developing units of work.
- 5 The Lesson**
The lesson is where your planning is put into action. Having a lesson plan can improve student outcomes and make planning easier.

As always, consult the most up to date version of the curriculum in your state or territory.

Guide to Teacher Planning Page 1  © P. Swan www.drpaulswan.com.au

A Guide to Teacher Planning

Telling Time to the Hour - Review

Name: _____

Date: _____

1. Draw the hands of the clock to show 8 o'clock



2. What time does this clock show?



Answer: _____

3. What time does this clock show?



Answer: _____

4. The digital clock shows 9:00. Show this on the analogue clock.

9:00



5. Write down in words what time this clock shows.



Answer: _____

Telling Time to the Half Hour - Review

Name: _____

Date: _____

1. Draw the hands of the clock to show half past eight.



2. What time does this clock show?



Answer: _____

3. What time does this clock show?



- four past six
- half past six
- four o'clock
- half past four
- half past three

4. Which clock shows half past two?



5. The digital clock shows 9:30. Show this on the analogue clock.

9:30



Time to the Quarter Hour Review

Name: _____

Date: _____

1. What time does this clock show?



- 3:07
- 3:35
- 7:03
- 7:15

2. What time does this clock show?



- 10:09
- 8:09
- 9:45
- 8:45

3. What time does this clock show?



- quarter to two
- quarter past two
- quarter to three
- quarter past three

4. Draw a digital clock showing 6:45. Show this on the analogue clock.



5. Write down in words what time this clock shows.



Answer: _____

Mental Computation Test 1 - Review for Year 4's & 5's

Background

The test was used as part of a research study carried out by McIntosh, Bana and Farrell (1995).

This test was originally used with Year 3 students, however given the changes to the curriculum and the change to school starting age, I think it is appropriate to use in review with Year 4's and 5's.

The test consists of 30 items. The test is repeated on a different day using the same items, but visually instead of orally.

All items were given devoid of any context, thereby eliminating the need for students to decide from the context which operation to use.

Items were given one at a time at 20 second intervals, which the authors recognise as being generous for some students but enough time for students to at least attempt them.

The answers are to be written onto an answer sheet where there is only room to write the answer. Students should be instructed not to write anything down but the answer.

The data for students in Western Australian Schools has been provided so that teachers can 'benchmark' their students against these previous results. This is one of the few Mental Computation tests available. Note the Westwood One Minute Basic Fact Test used by many schools assesses basic facts only, whereas this test goes beyond basic facts. Over time a school or a group of schools will collect enough data for comparisons to be made.

Instructions for Administering the test

To the administrator of the test

- The test will be conducted twice - first orally, then at a later date by showing the questions visually.
- 1st test (oral) question procedure: Read twice with a brief pause of 2 – 3 seconds between readings, followed by a 20 second wait time. No further repetitions are provided.
- 2nd test (visual) question procedure: Show on screen for 20 seconds. We have created a PPT slide show with a 20 second timing that you are welcome to download from www.drpaulswan.com.au.

Explain to the students:

- Do the calculations in your head
- Do not copy the numbers down
- Write the answer on paper, nothing else.
- The question will be stated once and repeated 3 seconds later.
- You will be shown the question for 20 seconds.

Reference: McIntosh, A., Bana, J., Farrell, B. (1995), *Mental Computation in School Mathematics: Preference, Attitude and Performance of Students in Years 3, 5, 7 and 9*. Perth: MASTEC.

Westwood, P. (2016). *Numeracy and Learning Difficulties: Approaches to teaching and assessment* 2nd Ed. Melbourne: ACER.

Mental Computation Test 1 - Review for Year 4's & 5's

Statistical Data

Year 3 range 0 – 29, Mean 12.27, SD 6.22

Results

You may be interested to learn that for this test there was a significance difference in performance between oral and written presentation, with performance overall on the oral test being much better. For the Upper Primary test (included in the Year 6 pack) the manner of presentation (visual/oral) did not matter overall, but there were a few questions where mode of presentation made a difference. I have included tables so you can make comparisons.

Generally for the majority of addition items students performed better when they were presented visually.

Year 3 students performed better on addition items than subtraction items. Likewise they tended to be better at doubling than halving numbers.

Order of Difficulty of items. Percentage Correct

#	Item	Oral	Visual	Average
16	6 + 8	91	79	85
2	20 + 70	73	95	84
29	Double 50	89	72	80
28	Double 8	79	71	74
17	16 + 9	78	62	70
1	36 + 9	67	72	69
3	36 + 20	61	70	65
13	Double 15	59	60	60
15	Half of 30	55	60	58
30	Half of 16	65	49	57
8	36 - 10	52	58	55
22	14 - 6	59	51	55
23	90 - 70	58	43	50
4	68 + 32	37	40	37
18	60 + 80	30	44	36
14	Double 26	34	35	34
9	73 - 23	30	32	31
5	25 + 27	22	38	30
6	25 + 99	29	30	30
26	100 - 25	27	32	29
7	36 - 9	30	26	28
24	74 - 30	25	17	21
25	140 - 60	16	26	20
19	79 + 26	17	16	17
20	58 + 34	17	16	17
11	100 - 68	11	10	10
10	80 - 24	4	12	8
27	105 - 97	10	6	8
12	105 - 26	6	4	5
21	182 + 97	4	2	3

based on data from 163 students

Order by Question Number

#	Item	Oral	Visual	Average
1	36 + 9	67	72	69
2	20 + 70	73	95	84
3	36 + 20	61	70	65
4	68 + 32	37	40	37
5	25 + 27	22	38	30
6	25 + 99	29	30	30
7	36 - 9	30	26	28
8	36 - 10	52	58	55
9	73 - 23	30	32	31
10	80 - 24	4	12	8
11	100 - 68	11	10	10
12	105 - 26	6	4	5
13	Double 15	59	60	60
14	Double 26	34	35	34
15	Half of 30	55	60	58
16	6 + 8	91	79	85
17	16 + 9	78	62	70
18	60 + 80	30	44	36
19	79 + 26	17	16	17
20	58 + 34	17	16	17
21	182 + 97	4	2	3
22	14 - 6	59	51	55
23	90 - 70	58	43	50
24	74 - 30	25	17	21
25	140 - 60	16	26	20
26	100 - 25	27	32	29
27	105 - 97	10	6	8
28	Double 8	79	71	74
29	Double 50	89	72	80
30	Half of 16	65	49	57

Mental Computation Student Review 1 Questions

Use this sheet for reading out questions to students.

Remember: read once, wait 3 seconds, read again. Allow 20 seconds for students to work out an answer

- | | | | |
|-----|---------------------|-----|---------------------|
| 1. | 36 and 9 | 16. | 6 and 8 |
| 2. | 20 and 70 | 17. | 16 and 9 |
| 3. | 36 and 20 | 18. | 60 and 80 |
| 4. | 68 and 32 | 19. | 79 and 26 |
| 5. | 25 and 27 | 20. | 58 and 34 |
| 6. | 25 and 99 | 21. | 182 and 97 |
| 7. | 36 take 9 | 22. | 14 take 6 |
| 8. | 36 take 10 | 23. | 90 take 70 |
| 9. | 73 take 23 | 24. | 74 take 30 |
| 10. | 80 take 24 | 25. | 140 take 60 |
| 11. | 100 take 68 | 26. | 100 take 25 |
| 12. | 105 take 26 | 27. | 105 take 97 |
| 13. | What is double 15? | 28. | What is double 8? |
| 14. | What is double 26? | 29. | What is double 50? |
| 15. | What is half of 30? | 30. | What is half of 16? |

Mental Computation Student Review Answer Sheet

Name _____

Date _____

1. _____

16. _____

2. _____

17. _____

3. _____

18. _____

4. _____

19. _____

5. _____

20. _____

6. _____

21. _____

7. _____

22. _____

8. _____

23. _____

9. _____

24. _____

10. _____

25. _____

11. _____

26. _____

12. _____

27. _____

13. _____

28. _____

14. _____

29. _____

15. _____

30. _____

Mental Computation Test 2 - Review for Year 6's

Statistical Data

Year 5 range 0 – 29, Mean 13.69 SD 8.03

Results

In the Year 3 test there was a significance difference in performance between oral and written presentation, with performance overall on the oral test being much better. For this test the manner of presentation (visual/ oral) did not matter overall, but there were a few questions where mode of presentation made a difference. I have included tables so you can make comparisons.

Generally for the majority of addition items students performed better when they were presented visually, except for $\frac{1}{2} + \frac{1}{4}$ in Year 5 where almost three times as many students were correct with the oral presentation compared with the visual presentation. The same thing occurred for the item, $\frac{3}{4} - \frac{1}{2}$.

Order of Difficulty of items. Percentage Correct

#	Item	Oral	Visual	Average
16	60 + 80	85	88	87
7	Double 26	80	79	80
2	68 + 32	68	89	79
1	58 + 34	66	88	77
20	140 – 60	77	67	72
10	Half of 52	74	67	71
17	79 + 26	59	73	66
19	74 – 30	64	45	55
4	80 – 24	55	53	54
5	100 – 68	54	53	53
25	300 ÷ 5	56	48	52
3	165 + 99	46	54	50
23	100 x 35	44	52	48
21	105 – 97	52	40	46
6	105 – 26	46	38	42
27	150 ÷ 25	42	39	40
14	$\frac{3}{4} - \frac{1}{2}$	59	17	38
9	7 x 25	34	40	37
13	$\frac{1}{2} + \frac{1}{4}$	55	19	37
15	6.2 + 4.9	35	38	37
18	182 + 97	21	51	36
28	$\frac{1}{2} + \frac{3}{4}$	36	29	33
29	1 – $\frac{1}{3}$	27	38	33
22	60 x 70	19	41	30
11	3500 ÷ 35	2	36	29
26	4200 ÷ 60	20	20	20
8	300 x 40	21	17	19
12	450 ÷ 15	17	15	16
30	0.5 + 0.75	12	13	13
24	38 x 50	6	9	7

Order by Question Number

#	Item	Oral	Visual	Average
1	58 + 34	66	88	77
2	68 + 32	68	89	79
3	165 + 99	46	54	50
4	80 – 24	55	53	54
5	100 – 68	54	53	53
6	105 – 26	46	38	42
7	Double 26	80	79	80
8	300 x 40	21	17	19
9	7 x 25	34	40	37
10	Half of 52	74	67	71
11	3500 ÷ 35	2	36	29
12	450 ÷ 15	17	15	16
13	$\frac{1}{2} + \frac{1}{4}$	55	19	37
14	$\frac{3}{4} - \frac{1}{2}$	59	17	38
15	6.2 + 4.9	35	38	37
16	60 + 80	85	88	87
17	79 + 26	59	73	66
18	182 + 97	21	51	36
19	74 – 30	64	45	55
20	140 – 60	77	67	72
21	105 – 97	52	40	46
22	60 x 70	19	41	30
23	100 x 35	44	52	48
24	38 x 50	6	9	7
25	300 ÷ 5	56	48	52
26	4200 ÷ 60	20	20	20
27	150 ÷ 25	42	39	40
28	$\frac{1}{2} + \frac{3}{4}$	36	29	33
29	1 – $\frac{1}{3}$	27	38	33
30	0.5 + 0.75	12	13	13

based on data from 163 students

Mental Computation Student Review 2 Questions

Use this sheet for reading out questions to students.

Remember: read once, wait 3 seconds, read again. Allow 20 seconds for students to work out an answer

- | | | | |
|-----|----------------------------------|-----|---------------------------------|
| 1. | 58 and 34 | 16. | 60 and 80 |
| 2. | 68 and 32 | 17. | 79 and 26 |
| 3. | 165 and 99 | 18. | 182 and 97 |
| 4. | 80 take 24 | 19. | 74 take 30 |
| 5. | 100 take 68 | 20. | 140 take 60 |
| 6. | 105 take 26 | 21. | 105 take 97 |
| 7. | What is double 26? | 22. | 60 times 70 |
| 8. | 300 times 40 | 23. | 100 times 35 |
| 9. | 7 times 25 | 24. | 38 times 50 |
| 10. | What is half of 52? | 25. | 300 divided by 5 |
| 11. | 3500 divided by 35 | 26. | 4200 divided by 60 |
| 12. | 450 divided by 15 | 27. | 150 divided by 25 |
| 13. | $\frac{1}{2}$ and $\frac{1}{4}$ | 28. | $\frac{1}{2}$ and $\frac{3}{4}$ |
| 14. | $\frac{3}{4}$ take $\frac{1}{2}$ | 29. | 1 take $\frac{1}{3}$ |
| 15. | 6.2 and 4.9 | 30. | 0.5 and 0.75 |

