

### **Foundation Skills**

Language, Literacy & Numeracy Activities Workbook



# Social, Community & Workplace English & Mathematics

NUMERACY SKILLS - ACSF LEVEL 5

Email: enquiriesIdteach2learn.com.au



Postal Address: P0 Box 71 Scarborough Qld 4020 Web: teach2learn.com.au

#### **Acknowledgements**

Each activity in this booklet has been aligned to the Australian Core Skills Framework (ACSF) \* indicators of competence so that they are at the levels appropriate to the delivery of language, literacy and numeracy skills underpinning the units of competency.

• \*The "Title to and Intellectual Property rights in relations to the Australian Core Skills Framework are owned by the Commonwealth of Australia".

Units of Competency and minimum required levels of reading, writing, numeracy, oral communication and learning skills ACSF level 5

Macro Skill	ACSF Reading Skills Level	ACSF Writing Skills Level	ACSF Oral Communication Skills Level	ACSF Numeracy Skills Level	ACSF Learning Skills Level
Learning Skills					5
Numeracy Skills				5	
Oral Communication Skills			5		
Reading Skills	5				
Writing Skills		5			

© All rights reserved. No part of this publication may be reproduced, stored in retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Teach2Learn Pty Ltd



## Numeracy Skills ACSF Level 5

#### **CONTENTS**

- 1. Thinking mathematically
- 2. Purchasing Instalment
- 3. Compound Interest
- 4. Depreciation
- 5. Algebra
- 6. Algebraic Fractions
- 7. Insurance Claims
- 8. Central Tendency
- 9. Frequency
- 10. Frequency Polygon
- 11. Triangular Theorems
- 12. Quadrilaterals
- 13. Purchasing Agreement
- 14. Triangles
- 15. Calculator
- 16. Bearings
- 17. Pool Problems
- 18. Number Series
- 19. Stratified Sampling
- 20. Triangular shapes
- 21. Self Assessment

Contact details & order information – refer last page.

#### **Activity 8 Central Tendency**



#### Complete the following thinking mathematically terms:

Mean is the average score = Total scores and divide by the number of scores e.g. 2,4,5,6,8, =  $25 \div 5 = 5$ 

Median is the middle score when the scores are arranged from smallest to largest e .g.2, 4, 5, 6, 8 = 5

Mode is the score that occurs the most. Highest frequency e.g. 2, 3, 4, 5, 5, 6 = 5

Range = Highest score – lowest score e.g. 2, 3, 4, 5, 5, 6 = 6-4

# Find the mean, median, mode, range of the following set of sport scores: 10,7,1,5,7,4, 6,3,8

Mean		
Median		
Mode		
Range		

Activity 13 Hire purchase Agreement



The sale price – cash price- for a shop fit out is \$294000. The proprietor pays 20% deposit and agrees to pay the balance over five years at an interest rate of 15%.

#### Calculate:

Deposit = part payment of the full value
Balance after deposit = amount owing after deposit paid
Interest on balance = amount of interest charged on balance
Instalments for each month = <u>Balance + interest</u> No. of months for repayment
Value after 5 years depreciation at 8% each year

#### Activity 17 Pool Problems

A swimming pool holds 200 litres of water. With the inflow valve open the liquid enters at the rate of 40 litres a minute. When the outflow valve is open the water drains away at 60 litres a minute.

Inflow rate = 40litres per minute
Output rate= 60litres per minute
Difference in I rate and O rate = 0-I litres



#### Use the above information to answer the following

1.	The pool is empty, the inflow valve is open and outflow
	valve closed.
	How many minutes will it take to fill the pool?
2.	The pool is full and both valves are open.
	How many minutes to empty the pool?

- **3.** The pool is empty and the outflow valve is closed, the inflow valve is turned on for three minutes then closed as the outflow valve is opened.
  - How many minutes does it take to empty the pool?\_\_\_\_
- **4.** The pool is full and the outflow is opened. Two minutes later the inflow valve is opened with the outflow valve still open.

How man	y litres	will 1	be in	the	pool	at the	e end	of	three
minutes?					_				

#### Activity 21 Self Assessment

## Name .....

Aspects of Communication	Task	<b>Activity Description</b>	Date	Task	Self Assessment Activity	Date
Public Communication	1	Thinking mathematically		1	Write an explains formulae abbreviations	
2		Purchasing instalment		2	Calculate instalments on white goods purchases	
	3	Compound Interest		3	Investigate different examples of compound interest	
	4	Depreciation		4	Calculate depreciation on office furniture	
System Communication	5	Algebra		5	Change a problem solving activity to and algebraic terms	
	6	Algebraic Fractions		6	List the uses for algebraic fractions	
	7	Insurance Claims		7	Reproduce data in pie form from a public company's Annual Report	
Cooperative Communication	8	Central Tendency		8	Locate this function on the calculator	
	9	Frequency		9	Locate Σ+ function on the calculator	
	10	Frequency Polygon		10	Illustrate the use of Σ+ function in an activity	
Personal Communication	11	Triangular Theorems		11	Document employment situations where you would use this information	
	12	Quadrilaterals		12	Explain how to find the central point of quadrilaterals	
	13	Purchasing Agreement		13	Write costing for a home kitchen fit out	
Technical Communication	14	Triangles		14	Locate the cos/sine/tan button on the calculator	
	15	Calculator		15	Illustrate the rule for constant multiplier	
Procedural Communication	16	Bearings		16	Find other examples where bearing are used	
	17	Pool Problems		17	Write pool problems as an algebra problem	
	18	Number Series		18	Record areas where number series are used as tests	
	19	Stratified Sampling		19	Use the same pattern to write a problem using attendance figures	
	20	Triangular Shapes		20	Compare the cos/sin/tan ratio	

# NOTES/QUESTIONS/COMMENTS



# Social & Workplace Language, Literacy & Numeracy Activities Workbook

#### Order from Teach2Learn Resources

**Email** <u>enquiries@teach2learn.com.au</u>

or

admin@mwtrain.com.au

Mail PO Box 71 Scarborough QLD 4020

Phone: 0432503256