

NCTM Content Standards Assessment Rubric

Number and Operations – Drill Sheets

Student's Name: _____ Assignment: _____ Level: _____

	Level 1	Level 2	Level 3	Level 4
Understanding Numbers, Ways of Representing Numbers, Relationships Among Number Systems	<ul style="list-style-type: none"> Demonstrates a limited understanding of numbers, ways of representing numbers and relationships among number systems 	<ul style="list-style-type: none"> Demonstrates a basic understanding of numbers, ways of representing numbers and relationships among number systems 	<ul style="list-style-type: none"> Demonstrates a good understanding of numbers, ways of representing numbers and relationships among number systems 	<ul style="list-style-type: none"> Demonstrates a thorough understanding of numbers, ways of representing numbers and relationships among number systems
Understanding Meanings of Operations and How They Relate to One Another	<ul style="list-style-type: none"> Demonstrates a limited understanding of the meanings of operations and how they relate to one another 	<ul style="list-style-type: none"> Demonstrates a basic understanding of the meanings of operations and how they relate to one another 	<ul style="list-style-type: none"> Demonstrates a good understanding of the meanings of operations and how they relate to one another 	<ul style="list-style-type: none"> Demonstrates a thorough understanding of the meanings of operations and how they relate to one another
Computing and Making Estimates	<ul style="list-style-type: none"> Demonstrates limited ability in computing and making estimates 	<ul style="list-style-type: none"> Demonstrates some ability in computing and making estimates 	<ul style="list-style-type: none"> Demonstrates satisfactory ability in computing and making estimates 	<ul style="list-style-type: none"> Demonstrates strong ability in computing and making estimates

WEAKNESSES:

STRENGTHS:

NEXT STEPS:

SAMPLE



4a) The following chart shows the fraction of Rob's total time spent on each game at a local arcade. Convert these fractions into percentages.

Ex: $5/10 = 5 \div 10 = 0.5 \times 100 = 50\%$

		Fraction	Percent
i)	DrumMania	1/5	
ii)	Time Crisis	3/10	
iii)	The King of Fighters	2/5	
iv)	Galaxian	1/10	



b) List the following integers in order from least to greatest.

-6, -13, -26, 9, 131, -1, 26 _____

c) Which of the following fractions is not equivalent to 1/42?

i. 1/6

ii. 1/3

iii. 2/14

iv. 21/126

d) Do 6^3 and 6×3 mean the same thing?

YES

NO

e) What is the number 10 000 written in standard form?

i)	77 561	
ii)	902 518.5	
iii)	10 872 663	

f) Calculate the following total costs.

	Bird	Cost of Bird	Cost of Cage	Tax (14%)	Total Cost
Ex:	Peacock	\$1900.00	+ \$200.00	(x 0.14 =) + \$294	= \$2,394.00
i)	African Grey Parrot	\$1000.00	\$120.00		
ii)	Red Macaw	\$1200.00	\$110.00		

g) What number comes before 2 000 000? _____

h) Replace each blank with the correct digit to make the number sentence correct.

i) $34\ 562 + 43\ \underline{\quad}94 = 77\ 856$

ii) $76\ \underline{\quad}43 - 45\ 992 = 30051$

iii) $7.\underline{\quad} \times 4.6 = 35.42$



Review B

a) What is the number 10 000 before the following:

i)	80 252	
ii)	952 873.6	

b) Multiply the following.

i) 5902×245	ii) $\$53.90 \times 376$	iii) 765.1×23.5	iv) 53.01×3.7
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

c) Calculate the mean, median and mode for the following list of numbers.

390, 440, 280, 782, 440, 336, 316

Mean	
Median	
Mode	

d) Record the following number in the accompanying place value chart. 29 064.013

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

e) Solve the following.

- | | |
|----------------------------------|---------------------------------|
| i) $1/3 \times 4/5 =$ | ii) $7/8 \div 1/4 =$ |
| iii) $7 \times 1/5 \times 2/7 =$ | iv) $2/3 \div 1/8 \times 1/2 =$ |
| v) $6.2 \times 10^2 =$ | vi) $0.002 \times 10^3 =$ |

Fractions, Percent



a) Record the following number in the accompanying place value chart.

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

b) Shade the model to show the correct fraction below.

Fraction =

c) Find the value of each percent.

i) _____ % of _____ = _____ ii) _____ % of _____ = _____

d) Place either a $>$ or $<$ symbol between the following pairs of fractions or decimals to indicate which is greater.

i) _____ _____ ii) _____ _____ iii) _____ _____

e) Convert the following improper fractions to mixed numbers.

i) _____ = _____ ii) _____ = _____ iii) _____ = _____

f) What is the correct way to write the number _____ in words?