

# Think Tank (Thinking Mathematically and Problem Solving) and TEKS

## 6<sup>th</sup> Grade

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Prickly Problems	3NO	8EER	8EER	8EER	4P	2NO	13M D	13M D	8EER	4P	4P	8EER	13M D	3NO	3NO	3NO	2NO	7EER	3NO	3NO
Brain Boosters	4P	7EER	3NO	3NO	8EER	8EER	4P	4P	4P	4P	4P	8EER	13M D	4P	8EER	3NO	3NO	8EER	13M D	3NO
Cranium Crackers	3NO	8EER	13M D	2NO	3NO	13M D	3NO	12M D	4P	8EER	13M D	2NO	3NO	12M D	8EER	7EER	4P	3NO	11M D	8EER
Quick Quizzes	4P	2NO	8EER	2NO	4P	4P	13M D	8EER	13M D	13M D	3NO	8EER	3NO	3NO	3NO	13M D	8EER	3NO	2NO	8EER
Head Polishers	7EER	3NO	2NO	3NO	8EER	2NO	2NO	13M D	8EER	3NO	2NO	4P	8EER	4P	13M D	3NO	4P	3NO	8EER	11M D
Mental Matters	3NO	2NO	8EER	4P	8EER	13M D	3NO	2NO	7EER	8EER	2NO	13M D	3NO	3NO	2NO	4P	3NO	12M D	11M D	12M D
Cracker Jacks	3NO	3NO	12M D	8EER	2NO	4P	3NO	8EER	2NO	2NO	3NO	8EER	2NO	11M D	4P	8EER	3NO	12M D	4P	4P
Thorough Thinkers	8EER	2NO	2NO	2NO	3NO	3NO	3NO	4P	3NO	8EER	2NO	3NO	7EER	4P	2NO	2NO	12M D	4P	3NO	12M D
Cool Heads	3NO	4P	8EER	12M D	2NO	12M D	7EER	3NO	3NO	2NO	3NO	3NO	3NO	2NO	8EER	12M D	3NO	4P	11M D	8EER
Wise Wizards	3NO	3NO	13M D	3NO	13M D	11M D	2NO	3NO	7EER	8EER	3NO	3NO	3NO	12M D	3NO	4P	8EER	4P	8EER	8EER
Super Sleuths	3NO	12M D	8EER	3NO	8EER	2NO	7EER	5P	8EER	12M D	3NO	2NO	3NO	3NO	12M D	3NO	3NO	8EER	8EER	4P
Mega Minds	3NO	12M D	8EER	4P	3NO	4P	2NO	2NO	3NO	12M D	8EER	3NO	7EER	8EER	12M D	3NO	8EER	8EER	4P	4P

## Texas Essential Knowledge and Skills

### Standard 1 - Mathematical process standards

The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

- (A) apply mathematics to problems arising in everyday life, society, and the workplace;
- (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;
- (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;
- (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;
- (E) create and use representations to organize, record, and communicate mathematical ideas;
- (F) analyze mathematical relationships to connect and communicate mathematical ideas; and
- (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

### Standard 2 - Number and Operations (2NO) – Rational Numbers

The student applies mathematical process standards to represent and use rational numbers in a variety of forms.

### Standard 3 – Number and Operations (3NO) – Computation

The student applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions.

### Standard 4 – Proportionality (4P) – Ratios and Percents

The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations.

### Standard 5 – Proportionality – (5P) Ratios, Percents, using scale factors, tables

The student applies mathematical process standards to solve problems involving proportional relationships.

### Standard 6 – Expressions, Equations, and Relationships (6EER) – Independent/dependent variables

The student applies mathematical process standards to use multiple representations to describe algebraic relationships.

### Standard 7 – Expressions, Equations, and Relationships (7EER) – Order of operations

The student applies mathematical process standards to develop concepts of expressions and equations.

**Standard 8 – Expressions, Equations, and Relationships (8EER) – Geometry Relationships**

The student applies mathematical process standards to use geometry to represent relationships and solve problems.

**Standard 9 – Expressions, Equations, and Relationships (9EER) – One Variable**

The student applies mathematical process standards to use equations and inequalities to represent situations.

**Standard 10 – Expressions, Equations, and Relationships (10EER) -**

The student applies mathematical process standards to use equations and inequalities to solve problems.

**Standard 11 – Measurement and Data (11MD) – Coordinate Plane**

The student applies mathematical process standards to use coordinate geometry to identify locations on a plane.

**Standard 12 – Measurement and Data (12MD) – Represent Numerical Data**

The student applies mathematical process standards to use numerical or graphical representations to analyze problems.

**Standard 13 – Measurement and Data (13MD) – Interpret Numerical Data**

The student applies mathematical process standards to use numerical or graphical representations to solve problems.

**Note to Teachers:** The Think Tank problems have been correlated to the Grade Level Standards in 6th Grade. Please refer to the TEKS and the grade level student expectations. This correlation is only a starting point in your instructional planning.