Numeracy strategies by skill level grid

### Descriptors

<table>
<thead>
<tr>
<th>Skill</th>
<th>Middle Years</th>
<th>Upper Years</th>
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</thead>
<tbody>
<tr>
<td><strong>Teaching Strategy</strong></td>
<td><strong>Learning Activity</strong></td>
<td><strong>Category</strong></td>
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<tr>
<td><strong>Early Years</strong></td>
<td><strong>Strategy</strong></td>
<td><strong>Target</strong></td>
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### Learning Goals

- **Reading comprehension:** Students will be able to read, interpret, and analyze text to identify main ideas and supporting details.
- **Mathematics:** Students will be able to solve problems using mathematical concepts and operations.
- **Science:** Students will be able to observe, describe, and explain natural phenomena.
- **Social Studies:** Students will be able to analyze historical events and understand cultural perspectives.
- **Art:** Students will be able to create and evaluate works of art.
- **Music:** Students will be able to perform and appreciate music.
- **Physical Education:** Students will be able to engage in physical activities and understand motor skills.

### Learning Activities

- **Reading:** Students will read and analyze a variety of texts, including novels, non-fiction, and poetry.
- **Mathematics:** Students will engage in problem-solving activities and mathematical reasoning.
- **Science:** Students will conduct experiments and analyze scientific data.
- **Social Studies:** Students will study historical events and policies and analyze their impacts.
- **Art:** Students will create and critique visual artworks.
- **Music:** Students will participate in music performances and appreciate different genres.
- **Physical Education:** Students will participate in physical fitness activities and learn about personal health.

### Teaching Strategies

- **Direct Instruction:** Teachers will provide structured lessons and guided practice to ensure student understanding.
- **Differentiated Instruction:** Teachers will adapt instruction to meet the diverse needs of students.
- **Cooperative Learning:** Students will work in groups to learn from and with each other.
- **Technology Integration:** Students will use technology tools to enhance learning experiences.
- **Project-Based Learning:** Students will complete projects that require critical thinking and problem-solving.
- **Flipped Classroom:** Students will watch video lectures at home and engage in hands-on activities in class.
- **Blended Learning:** Students will combine traditional classroom instruction with online learning experiences.

### Assessment

- **Formative Assessment:** Teachers will use assessments to monitor student progress and provide feedback.
- **Summative Assessment:** Students will be assessed through quizzes, tests, and final exams to evaluate their knowledge and skills.
- **Self-Assessment:** Students will reflect on their learning and set personal goals for improvement.
- **Peer Assessment:** Students will evaluate their peers' work to foster collaborative learning.
- **Rubrics:** Teachers will use rubrics to provide clear expectations and criteria for success.

### Cross-Curricular Integration

- **Mathematics and Science:** Students will explore mathematical concepts through scientific investigations.
- **Mathematics and Social Studies:** Students will analyze historical data and use mathematical tools to make predictions.
- **Mathematics and Art:** Students will use geometric shapes and patterns in their art projects.
- **Mathematics and Music:** Students will learn about rhythms and patterns in music.
- **Mathematics and Physical Education:** Students will use mathematical concepts to understand physical fitness and health.
- **Mathematics and Technology:** Students will apply mathematical concepts to technology tools and software.

### Additional Resources

- **Online Learning Platforms:** Access to educational websites and interactive tools.
- **Books and Textbooks:** Essential and supplementary materials for instruction.
- **Manipulatives:** Physical objects used to demonstrate mathematical concepts.
- **Software:** Educational software and apps for learning.
- **Workshops and Tutoring:** Professional development and support for teachers.
- **Community Links:** Connections to community resources and organizations.

### Support for All Learners

- **Special Education:** Additional supports for students with disabilities or learning differences.
- **Gifted Education:** Enrichment opportunities for students with advanced skills.
- **English Language Learners:** Support for students learning English as a second language.
- **Counseling Services:** Mental health support and guidance for students.
- **After-School Programs:** Extra-curricular activities for student engagement.
- **Online Libraries:** Access to digital resources for learning.

### Classroom Environment

- **Classroom Layout:** Flexible seating arrangements and space for group work.
- **Visual Aids:** Charts, graphs, and diagrams for visual learning.
- **Technology Access:** Access to computers, tablets, and other digital tools.
- **Natural Light:** Adequate lighting for visual comfort.
- **Noise Control:** Quiet environments for focused learning.

### Professional Development

- **Staff Training:** Ongoing professional development for teachers.
- **Collaborative Planning:** Teamwork and collaboration among educators.
- **Parent and Community Involvement:** Engaging families and communities in student learning.
- **Research-Based Practices:** Integration of evidence-based instructional strategies.
- **Professional Learning Communities:** Supportive communities for continuous improvement.
- **Data-Driven Decision Making:** Use of data to inform teaching practices.

### Evaluation

- **Data Collection:** Regular collection of student data for monitoring progress.
- **Data Analysis:** Analysis of student data to identify areas for improvement.
- **Reflection:** Teachers will reflect on their teaching practices and student outcomes.
- **Adjustment:** Teachers will adjust instruction based on student needs.
- **Feedback:** Frequent feedback to students and parents on progress.

### Standards

- **State Standards:** Compliance with state educational standards and benchmarks.
- **Common Core Standards:** Alignment with national educational standards.
- **National Board Certification:** Professional recognition for educators.
- **Professional Organizations:** Membership in educational organizations.
- **Research Evidence:** Use of research-based practices in instruction.
- **Innovation:** Implementation of new and innovative teaching strategies.
<table>
<thead>
<tr>
<th>Levels</th>
<th>Description</th>
<th>Learning Intention</th>
<th>Junior Years</th>
<th>Middle Years</th>
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<td>Inappropriate placement in small talk salads, Directed instruction, Expository teaching.</td>
<td>Demonstrate and apply basic fraction and decimal concepts.</td>
<td>Teacher will explain how to use the language.</td>
<td>Teachers, through a variety of applications, individual student names will be used to express the relationship between them.</td>
<td>Students will evaluate various situations.</td>
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