



Educational Worksheets Repository

A comprehensive, organized collection of educational worksheets for all grades and subjects, with professional conversion tools and structured difficulty levels.

License

MIT

Grades

1-12

Curriculum

Multiple Standards



Overview

This repository provides a scalable framework for educational worksheets organized by: - **Subject** (Mathematics, Science, English, etc.) - **Grade Level** (Grades 1-12) - **Topic** (Specific learning areas) - **Difficulty** (Easy, Medium, Hard)

Perfect for **teachers**, **tutors**, **homeschooling parents**, and **students**! ✨



Repository Structure

educational-worksheets/

```

├── 📖 worksheets/                                # Main worksheet collection
│   ├── mathematics/                             # Subject: Mathematics
│   │   ├── grade-01/                            # Grade level
│   │   │   ├── topic-name/                     # Mathematical topic
│   │   │   │   ├── easy/                      # Difficulty: Beginner level
│   │   │   │   ├── medium/                   # Difficulty: Intermediate level
│   │   │   │   └── hard/                     # Difficulty: Advanced level
│   │   ├── grade-02/ ... grade-12/            # All grade levels
│   ├── science/                                # Additional subjects (planned)
│   ├── english/                                # Additional subjects (planned)
│   └── ... (other subjects)
├── 🗝️ answer-keys/                             # Complete answer guides
│   ├── mathematics/
│   │   ├── grade-01/ ... grade-12/
│   │   └── ... (matching worksheet structure)
├── 🔧 tools/                                    # Professional conversion tools
│   ├── converters/                             # HTML/PDF generation scripts
│   └── scripts/

```

			create-pdfs.sh	# PDF generation
			convert-to-html.sh	# HTML conversion
			generate-pdfs.sh	# Master script
			generators/	# Worksheet creation tools
(planned)				
			templates/	# Reusable worksheet templates
			docs/	# Documentation and standards
			curriculum-standards/	# Curriculum alignment guides
			output/	# Generated files (HTML, PDF)

Quick Start

For Teachers:

1. **Browse** to your subject and grade level
2. **Choose** difficulty level appropriate for your students
3. **Use** conversion tools to create PDF versions for printing
4. **Check** answer keys for complete solutions

For Students:

1. **Find** your grade level and subject
2. **Start** with easy difficulty and progress upward
3. **Complete** self-assessment sections honestly
4. **Check** your work with provided answer keys

For Parents/Tutors:

- **Grade-appropriate** content for targeted learning
- **Progressive difficulty** allows skill building
- **Answer keys** support home learning

- **Real-world applications** make learning meaningful
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Current Content



Mathematics - Grade 7 (Ready to Use!)

Decimals (Add and Subtract)

- **Location**: worksheets/mathematics/grade-07/decimals/medium/
- **File**: add-subtract-decimals.md
- **Topics**: Basic operations, word problems, estimation
- **Duration**: 45-60 minutes | **40 marks total**

Map Scale

- **Location**: worksheets/mathematics/grade-07/map-scale/medium/
- **File**: map-scale-problems.md
- **Topics**: Scale interpretation, distance conversion, real-world applications
- **Duration**: 45-60 minutes | **40 marks total**

Ratio and Direct Proportion

- **Location**: worksheets/mathematics/grade-07/ratios-proportions/medium/
- **File**: ratio-proportion-problems.md
- **Topics**: Simplifying ratios, equivalent ratios, proportion problems
- **Duration**: 45-60 minutes | **40 marks total**

Complete Answer Keys

- **Location**: answer-keys/mathematics/grade-07/

- **File**: answer-keys.md
 - **Content**: Step-by-step solutions, teaching notes, assessment criteria
-

Conversion Tools

PDF Generation

```
cd tools/converters  
./generate-pdfs.sh # Creates PDF versions of all worksheets
```

HTML Generation




```
cd tools/converters/scripts  
./convert-to-html.sh # Creates web-friendly versions
```

Print Optimization

- Professional CSS styling for clean printing
 - A4 page optimization
 - Proper margins and font sizing
 - Chrome headless PDF generation
-

Educational Features

Curriculum Aligned

-  Multiple curriculum standards supported
-  Age-appropriate for each grade level
-  Professional educational design



Pedagogical Design

- 🌟 **Progressive difficulty** within each topic
- 🔄 **Variety of question types** (computation → application → problem-solving)
- 🌍 **Real-world contexts** (shopping, travel, science, cooking)
- 🇮🇹 **Self-assessment** sections for student reflection



Teacher Resources

- 📄 **Clear learning objectives** for each worksheet
 - ⌚ **Time estimates** for lesson planning
 - 📝 **Marking schemes** with point allocations
 - 💡 **Extension ideas** for differentiation
-



Difficulty Level Guide



Easy Level

- Introduction to new concepts
- Basic practice problems
- Step-by-step guidance
- Suitable for initial learning



Medium Level

- Application of learned concepts
- Mixed problem types
- Real-world scenarios

- Standard curriculum level

Hard Level

- Advanced problem solving
 - Multi-step challenges
 - Extension activities
 - Enrichment for advanced students
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Contributing

We welcome contributions to expand this educational resource!

Add New Content

- Create worksheets for missing grades/subjects
- Add difficulty variations
- Develop new topics

Improve Existing Content

- Report issues or suggestions
- Enhance question quality
- Update curriculum alignment

Enhance Tools

- Improve conversion scripts
- Add new output formats
- Create worksheet generators





Contact

- **Issues**: Use GitHub Issues for bug reports
 - **Suggestions**: Open discussions for new ideas
 - **Direct contact**: For educational partnerships
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License

This project is licensed under the **MIT License** - see the [LICENSE](#) file for details.

Educational Use

-  **Free for educational use** in schools and homes
 -  **Modify and adapt** to suit your needs
 -  **Share with colleagues** and other educators
 -  **Commercial use allowed** with attribution
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Future Plans

Content Expansion

- ☐ Complete Grade 1-12 Mathematics coverage
- ☐ Add Science worksheets (Physics, Chemistry, Biology)
- ☐ Include English Language Arts materials
- ☐ Develop other subject areas

Tool Enhancement

- ☐ Automated worksheet generators
- ☐ Interactive web versions

- ☐ Assessment and tracking tools
- ☐ Multi-language support

Community Features

- ☐ Teacher sharing platform
- ☐ Student progress tracking
- ☐ Curriculum mapping tools
- ☐ International standards alignment


Current Stats


Grades Structured 1-12

Subjects Mathematics (Active)

Worksheets 3 (Grade 7)

Difficulty Levels 3 (Easy, Medium, Hard)

 **Ready to transform education? Start exploring and contributing!**

Created with  for educational excellence