

Danny Kids STEAM 教材介紹

教材介紹線上瀏覽 <https://banjo.my.canva.site/steam>



一、特色

LEARNING CONTENT AND GOALS

- ✓ Art and easy science
藝術及簡單科學主題及其相關概念介紹
- ✓ Scientific Method
科學方法概念訓練
- ✓ Presentation Skills
簡報技巧訓練
- ✓ Thor 索爾為主角編寫的全新故事
Activity 活動問答設計理解故事內容
- ✓ Key words 關鍵單字及句型練習
DIY crafts 手作DIY及小實驗
- ✓ Operation 實驗操作與分析歸納
Conclusion 觀察分析與互動引導式表達想法



二、封面與內頁

BOOK SERIES

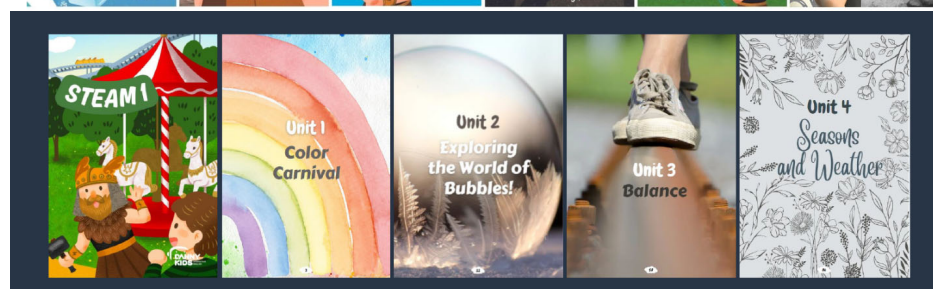


TABLE OF CONTENTS		
Unit 1 Color Carnival 10 hrs		
LESSON 1	Colors Activity	3
LESSON 2	Mixing Colors Activity	16
LESSON 3	Color Changing Water Experiment	16
LESSON 4	Color Changing Sensory Bottle Experiment	16
LESSON 5	Magic Milk Painting Experiment	16
LESSON 6	Making Beautiful Light Experiment	21
LESSON 7	Crafting Coloring Flowers Experiment	21
LESSON 8	From Nervous to Natural	31
Unit 2 Exploring the World of Bubbles! 10 hrs		
LESSON 1	Daily Bubbles	33
LESSON 2	Oil Bubbles in Water Experiment	33
LESSON 3	Materials for Catching Bubbles	39
LESSON 4	Gloves for Bouncing Bubbles Activity	39
LESSON 5	Fantastic Bubble Solution Activity	44
LESSON 6	Bubble Solution Fun Experiment	44
LESSON 7	Making the Most Bubble Layers Experiment	44
Unit 3 Balance 10 hrs		
LESSON 1	Balance in the Human Body Activity	56
LESSON 2	Balancing Bird Experiment	63
LESSON 3	Sculptures with a Twist Experiment	63
LESSON 4	Craft Stick Engineering Part 1 Experiment	76
LESSON 5	Craft Stick Engineering Part 2 Experiment	76
LESSON 6	Homemade Scale Experiment	76
LESSON 7	Walking Paper Horse Activity	76
LESSON 8	The Cup Tower Activity	81
LESSON 9	Team Challenge: Bridge Master Activity	81
Unit 4 Seasons and Weather 10 hrs		
LESSON 1	The Weather in Four Seasons	86
LESSON 2	Weather Wheel Activity Experiment	86
LESSON 3	Winter	92
LESSON 4	Do you want to build a Snowman? Experiment	92
LESSON 5	Spring	97
LESSON 6	Colorful Bouncy Eggs Experiment	97
LESSON 7	Butterfly, Butterfly: Flap, Flap, Flap! Activity	97
LESSON 8	Summer	103
LESSON 9	Water Ten Games with Balloons Experiment	103

Unit 1 Lesson 1

COLORS

Red, yellow, and blue are the main colors. They're the colors we start with. Colors are fun! What's your favorite color?

What Is RYB?
RYB stands for 'Red, Yellow, and Blue'.

My favorite color is violet.

Activity

blue cellophane yellow cellophane red cellophane
1 plastic bag glue scissors

Look at all the colors!

Worksheet

★ Put a check(✓) if the spelling is correct or an X if it's not and fix the spelling.

Example: yellow ☒ yellow

gren ☐ _____

rad ☐ _____

orange ☐ _____

bleu ☐ _____

Q: What are the main colors?
A: They are _____ and _____.

Q: What's your favorite color?
A: My favorite color is _____.

三、教學資源

- 教學播放檔: 課堂教學使用



- Teacher Manual: 提供教學目標、教學重點說明、注意事項提醒與學習單解答



Table of Contents	
Unit 1 Lesson 1 Part 1	4
Unit 1 Lesson 1 Part 2	7
Unit 1 Lesson 2 Part 1	10
Unit 1 Lesson 2 Part 2	13
Unit 1 Lesson 3 Part 1	16
Unit 1 Lesson 3 Part 2	18
Unit 1 Lesson 4 Part 1	21
Unit 1 Lesson 4 Part 2	24
Unit 1 Lesson 5 Part 1	27
Unit 1 Lesson 5 Part 2	29
Unit 2 Lesson 1 Part 1	32
Unit 2 Lesson 1 Part 2	34
Unit 2 Lesson 2 Part 1	37
Unit 2 Lesson 2 Part 2	39
Unit 2 Lesson 3 Part 1	42
Unit 2 Lesson 3 Part 2	44
Unit 2 Lesson 4 Part 1	47
Unit 2 Lesson 4 Part 2	49
Unit 2 Lesson 5 Part 1	51
Unit 2 Lesson 5 Part 2	53
Unit 3 Lesson 1 Part 1	57
Unit 3 Lesson 1 Part 2	60

Unit 1 Lesson 1 Part 1

Objectives

- Identify Primary Colors**
Identify red, yellow, and blue as primary colors.
- Understand RYB**
Learn that RYB stands for Red, Yellow, and Blue.
- Expand Color Vocabulary**
Recognize and name additional colors: green, black, violet, white, and orange.
- Hands-On Exploration**
Cut and paste red, yellow, and blue cellophane circles onto plastic bags.
- Scientific Observation**
Observe and describe the effects of viewing scenery through colored cellophane.

Introduction

1. Inform the class that we will explore the magic of colors. Ask the class to read page 4 in their student books (SB).

2. Introduce the main (primary) colors: red, blue, and yellow.

Explain that Red, yellow, and blue are the main colors. They're the colors we start with. These colors are unique because they cannot be made by mixing other colors.

Engage the class by asking, "Can anyone tell me the main colors?" Guide them to respond, "The main colors are red, yellow, and blue."

3. Teach the class about RYB.

Explain that RYB stands for 'Red, Yellow, and Blue.' Then, ask the class, "What is RYB?" Encourage them to respond, "RYB stands for Red, Yellow, and Blue."

4. Introduce additional color words: green, black, violet, white, and orange.

5. Share, "My favorite color is red. How about you?" Choose a student to respond and guide them to say, "My favorite color is red."

6. Encourage the class to ask each other, "What's your favorite color?" Randomly pick a student to answer the question aloud.

