



TOUCHPAD[®]

MODULAR Ver 1.0

Teacher's Manual

Extended Support for Teachers



ORANGE[™]

www.orangeeducation.in

www.thetouchpad.com

Teacher's Time Table



<div>Periods</div> <div>Days</div>	0	I	II	III	IV	V	VI	VII	VIII
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									

B

R

E

A

K



DEVELOPMENT MILESTONES IN A CHILD

Development milestones are a set of functional skills or age-specific tasks that most children can do at a certain age. These milestones help the teacher to identify and understand how children differ in different age groups.

Age 5 - 8 Years	
Physical	<ul style="list-style-type: none">• First permanent tooth erupts• Shows mature throwing and catching patterns• Writing is now smaller and more readable• Drawings are now more detailed, organised and have a sense of depth
Cognitive	<ul style="list-style-type: none">• Attention continues to improve, becomes more selective and adaptable• Recall, scripted memory, and auto-biographical memory improves• Counts on and counts down, engaging in simple addition and subtraction• Thoughts are now more logical
Language	<ul style="list-style-type: none">• Vocabulary reaches about 10,000 words• Vocabulary increases rapidly throughout middle childhood
Emotional/Social	<ul style="list-style-type: none">• Ability to predict and interpret emotional reactions of others enhances• Relies more on language to express empathy• Self-conscious emotions of pride and guilt are governed by personal responsibility• Attends to facial and situational cues in interpreting another's feelings• Peer interaction is now more prosocial, and physical aggression declines

"If you cannot do great things, do small things in a great way."

Age 9 - 11 Years	
Physical	<ul style="list-style-type: none"> • Motor skills develop resulting enhanced reflexes
Cognitive	<ul style="list-style-type: none"> • Applies several memory strategies at once • Cognitive self-regulation is now improved
Language	<ul style="list-style-type: none"> • Ability to use complex grammatical constructions enhances • Conversational strategies are now more refined
Emotional/Social	<ul style="list-style-type: none"> • Self-esteem tends to rise • Peer groups emerge

Age 11 - 20 Years	
Physical	<ul style="list-style-type: none"> • If a girl, reaches peak of growth spurt • If a girl, motor performance gradually increases and then levels off • If a boy, reaches peak and then completes growth spurt • If a boy, motor performance increases dramatically
Cognitive	<ul style="list-style-type: none"> • Is now more self-conscious and self-focused • Becomes a better everyday planner and decision maker
Emotional/Social	<ul style="list-style-type: none"> • May show increased gender stereotyping of attitudes and behaviour • May have a conventional moral orientation

Managing the children's learning needs according to their developmental milestones is the key to a successful teaching-learning transaction in the classroom.



"Family is the most important thing in the world."



TEACHING PEDAGOGIES

Pedagogy is often described as the approach to teaching. It is the study of teaching methods including the aims of education and the ways in which such goals can be achieved.

Lesson Plans

A lesson plan is the instructor's road map which specifies what students need to learn and how it can be done effectively during the class time. A lesson plan helps teachers in the classroom by providing a detailed outline to follow in each class.

A lesson plan addresses and integrates three key components:

- Learning objectives
- Learning activities
- Assessment to check the student's understanding

A lesson plan provides an outline of the teaching goals:

Before the class:

1. Identify the learning objectives.
2. Plan the lesson in an engaging and meaningful manner.
3. Plan to assess student's understanding.
4. Plan for a lesson closure.

During the class:

Present the lesson plan.

After the class:

Reflect on what worked well and why. If needed, revise the lesson plan.

"Knowing yourself is the beginning of all wisdom."

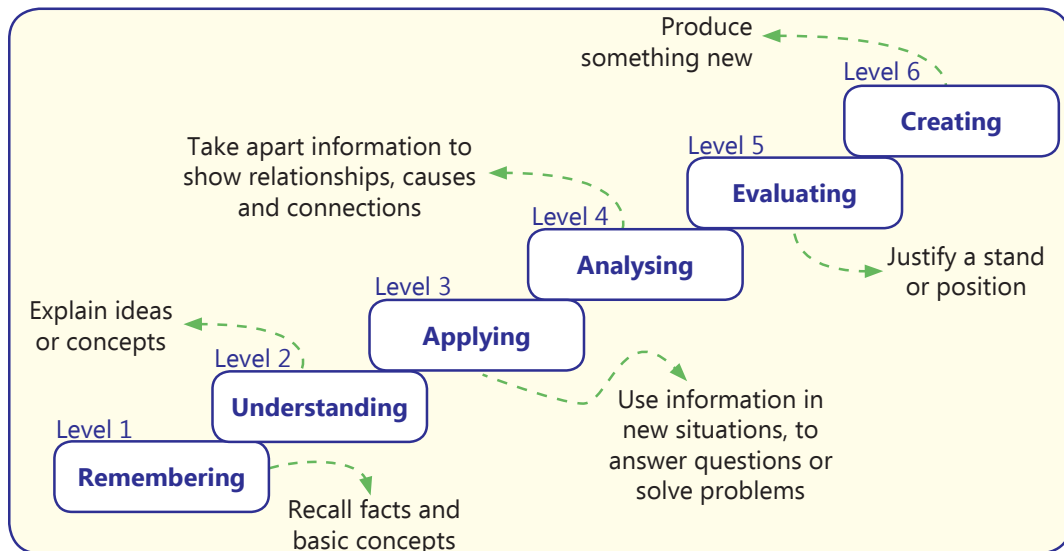
Teaching Strategies

Numerous strategies have evolved over the years to facilitate the teaching-learning process in the classrooms.



Bloom's Taxonomy

Bloom's Taxonomy was created by **Dr Benjamin Bloom** and several of his colleagues, to promote higher forms of thinking in education instead of rote learning. There are three domains of learning: cognitive (mental), affective (emotional), and psychomotor (physical). However, when we refer to Bloom's Taxonomy we speak of the cognitive domain. Bloom's Taxonomy is a list of cognitive skills that is used by teachers to determine the level of thinking their students have achieved. As a teacher, one should attempt to move students up the taxonomy as they progress in their knowledge.



Teachers should focus on helping students to remember information before expecting them to understand it, helping them understand it before expecting them to apply it to a new situation, and so on.

"If you have no confidence in self, you are twice defeated in the race of life."

LESSON PLAN

Touchpad MODULAR Ver 1.0
Class-9

1. Ethics and Safety Measure in Computing

Teaching Objectives

Students will learn about

- ☞ What is Internet?
- ☞ What are Internet Ethics?
- ☞ Safety Measures while using Computer/Internet
- ☞ Digital Footprints
- ☞ Computer Ethics
- ☞ What are Unethical Practices?

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students that what is Internet and what are its advantages & disadvantages.

Introduce computer ethics and etiquettes.

Share examples of some unethical practices involving computers:

- Plagiarism
- Hacking
- Soft ware Piracy
- Patent
- Cyber bullying
- Spamming
- Intellectual property rights
- Trademark
- Phishing
- Individual right to privacy
- Copyright

Tell the students about the safety measures to be followed while using computer/Internet.

Explain to the students what is digital footprints and how to delete digital footprints.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is a plagiarism?
- Q. State any two advantages and two disadvantages of internet.
- Q. State any two methods by which a computer may be used unethically.
- Q. State any two types of intellectual property rights.
- Q. What is digital footprint?
- Q. What is the main purpose of computer ethics and etiquettes?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 16 and 17 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 17 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to collect information about ethical practices to be followed while using computer/ Internet and make a chart on the same using MS Word.

2. HTML-An Introduction

Teaching Objectives

Students will learn about

- | | |
|------------------------------|-----------------------------------|
| What is HTML? | Creating and Saving HTML Document |
| HTML Tags and Attributes | Basic HTML Tags |
| Rules for Writing HTML Codes | Designing a Web Page |
| HTML Document Structure | Editing an Existing HTML |

Teaching Plan

Number of periods: 5

While teaching this chapter, tell the students that websites consist of millions of pages called web pages which contain text, graphics, audios, videos and links to other pages.

Introduce Hypertext Markup Language (HTML) as language that describes the structure of a web page. Make the students understand the meaning of the terms like hypertext and markup language. Tell the students about the tools needed for working with HTML.

Make the students aware about the different types of HTML editors – WYSIWYG editor and Text editor.

Familiarise the students with basic HTML terms like tags, container tags, empty tags, block level tags, text level tags and attributes.

Tell the students about the concept of nesting of tags.

Share with the students the general rules followed for writing HTML codes.

Show to the students a HTML document and make them understand and identify the various sections and structure of the HTML document.

Demonstrate to the students the steps involved in:

- Creating a HTML document
- Saving a HTML document
- Previewing a web page.

Tell the students about the meaning and use of basic HTML tags covering <HTML>, <HEAD>, <TITLE> and <BODY> tags along with their attributes.

Tell the students about some more HTML tags like Heading, Paragraph, Line Break, Horizontal Ruler (and its attributes), Bold, Italic, Underline, Superscript and Subscript tags.

Share with the students about the use of tag and its attributes.



Demonstrate to the students the steps involved in designing a web page using the various HTML tags discussed.

Show the students the method of editing an existing HTML document.

Extension

Ask the students some oral questions based on this chapter.

- Q. Q. What is HTML?
- Q. Define hypertext and Markup language.
- Q. Name the different types of HTML editors.
- Q. What are tags and attributes?
- Q. State the rules followed while writing HTML codes.
- Q. Name the text editor most commonly used to write HTML codes.
- Q. State the use of <HTML> / <HEAD> / <BODY> / <TITLE> tags.
- Q. What is the difference between container tags and empty tags?
- Q. What attributes can be taken by the tag?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 24 and 25 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 25 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to develop a similar web page in HTML.

3. Formatting a Web Page

Teaching Objectives

Students will learn about

- | | |
|------------------------|--------------------|
| ■ The <Hn> Tag | ■ The
 Tag |
| ■ The <HR> Tag | ■ The Tag |
| ■ The <I> Tag | ■ The <U> Tag |
| ■ The <SUP> Tag | ■ The <SUB> Tag |
| ■ The Tag | ■ The <CENTER> Tag |
| ■ Designing a Web Page | |

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students about HTML and Internet.

Introduce HTML to the students using examples.

Explain to the students the HTML tags and attributes which are:

- <Hn> tag
- tag
- <SUP> tag
- <CENTER> tag
-
 tag
- <I> tag
- <SUB> tag
- <HR> tag
- <U> tag
- tag

Demonstrate to the students the steps involved in using these tags using programs and syntax.

Share with the students the steps involved in designing a web page.

Extension

Ask the students some oral questions based on this chapter.

Q. What is HTML?

Q. What is the function of:

- <Hn> tag
- tag
- <SUP> tag
- <CENTER> tag
-
 tag
- <I> tag
- <SUB> tag
- <HR> tag
- <U> tag
- tag

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 34 and 35 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 36 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the student to create a web page using all the HTML Tags taught in this chapter.

4. Lists in HTML

Teaching Objectives

Students will learn about

☞ Ordered List

☞ Unordered List

☞ Definition List

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students that HTML tags are used to create a web page.

Introduce list as collection of related items.

Tell the students that there are three types of lists – Ordered List (Numbered List), Unordered List (Bulleted List) and Definition List (Description List).



Explain the use of tag to create ordered lists, tag to create unordered lists and <DL> tag to create definition lists. (See Suggested Activity 1 also).

Extension

Ask the students some oral questions based on this chapter.

- Q. Define List.
- Q. How many types of Lists can be created in HTML?
- Q. Name the different types of Lists that can be created in HTML.
- Q. What is an Ordered / Unordered / Definition List?
- Q. Name the attributes of tag.
- Q. Name the tags used to create Definition List.

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 41 and 42 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 42 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a list of favourite games of 10 friends.

5. Tables in HTML

Teaching Objectives

Students will learn about

- Attributes of the <TABLE> Tag
- Attributes of the <TR> Tag
- Attributes of the <TD> Tag
- HTML Code to Create a Table

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students that HTML tags are used to create a table in web page.

Explain the use of <TABLE> tag and its child tags covering <TR>, <TD>, <TH> and <Caption>.

Explain the use of different attributes of <TABLE> tag covering BORDER, BORDERCOLOR, FRAMES, BGCOLOR, BACKGROUND, HEIGHT, WIDTH, CELSPACING and CELLPADDING.

Discuss the use of different attributes of <TD> tag explaining about ALIGN, BGCOLOR, WIDTH, ROWSPAN, COLSPAN and VALIGN attributes.

Tell the students that all the attributes except ROWSPAN and COLSPAN are taken up by <TR> tag also.

Demonstrate the code to create a table and its data in HTML. (See Suggested Activity also).

Extension

Ask the students some oral questions based on this chapter.

- Q. Define Table.
- Q. Name the tags that can be used to create different kinds of tables.
- Q. What are the attributes of <TABLE> / <TD> tag?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 52 and 53 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 53 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a table of car names and their models.

6. Images, Links and Frames in HTML

Teaching Objectives

Students will learn about

- Inserting images
- Linking web pages
- Creating marquee
- Frames

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students that HTML allows inserting images and frames on web pages as well as interlinking them.

Tell the students that HTML supports JPEG, GIF and PNG image formats.

Tell the students that tag is used to insert images and it takes the attributes as SRC, WIDTH, HEIGHT, ALIGN, BORDER and ALT.

Demonstrate to the students the use of tag and its attributes.

Introduce Marquee as the moving objects on a web page to get special attention of the users.

Explain the use of <MARQUEE> tag and its attributes as BEHAVIOUR, DIRECTION and SCROLLAMOUNT.

Make the students understand that a hyperlink is an underlined text or an image which when clicked takes the user to some other location.

Share with the students that <A> is used to create links and the attributes that this tag can take are – LINK, ALINK and VLINK.

Demonstrate the use of <A> tag and its attributes to hyperlink web pages (See Suggested Activity also).

Introduce Frames as a feature to display more than one web page on a single screen of the web browser.



Explain the use of <FRAMESET> tag and <FRAME> tag to create and define frames on a web page. Tell the students that the <FRAME> tag can take FRAMEBORDER, NORESIZE and SRC as attributes. Demonstrate the use of <FRAMESET> and <FRAME> tags to create frames on a web page.

Extension

Ask the students some oral questions based on this chapter.

- Q. Which tag is used to insert images on a web page?
- Q. State the use of SRC / WIDTH / ALIGN /ALT attribute of IMG tag.
- Q. Which image formats are supported by HTML?
- Q. What is the use of MARQUEE tag?
- Q. Which tag is used to link web pages?
- Q. Name the attributes that can be taken by FRAME tag.

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 65, 66 and 67 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 67 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create an e-shopping web site listing categories of items on home page and details of items on separate category pages.

7. Forms in HTML

Teaching Objectives

Students will learn about

☞ What is Form in HTML?

☞ Using <INPUT> Tag

Teaching Plan

Number of periods: 2

While teaching this chapter, tell the students that a form is a collection of different types of fields to take the input from a user. It replaces the paper-based forms used earlier. Also, in HTML you can create forms as well as interlink them within pages.

Tell the students what is a form in HTML and define the <FORM> tag.

Explain the students about the <INPUT> tag and how to use the same with proper details.

Show the students how to add:

- Text box
- Password field
- Radio button
- Combo box
- Checkbox

Demonstrate the students about the <TEXTAREA> tag and how to use the same with proper details.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is a form?
- Q. What is the use of <FORM> tag?
- Q. What is the use of <INPUT> tag?
- Q. What is the use of <TEXTAREA> tag?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 76, 77 and 78 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 78 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a form in HTML to add details of medical details of their family members.

8. Cascading Style Sheets

Teaching Objectives

Students will learn about

- | | |
|--------------------|------------------------|
| ▪ Selectors | ▪ Link Style Sheet |
| ▪ Background Color | ▪ CSS Border |
| ▪ CSS Margins | ▪ CSS Height and Width |
| ▪ CSS Outline | ▪ CSS Font |
| ▪ Align Text | ▪ CSS Float |

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students that Cascading Style Sheet' is commonly referred to as CSS. It is a simple design language which enables to simplify the process of making web pages.

Explain to the students about CSS and its role in HTML.

Tell the students about the Selectors and their categories:

- Type Selector
- Element Selector

Explain to the students about Link Style Sheet and three ways of inserting:

- External Style Sheet
- Internal Style Sheet
- Inline Sheet

Show the students how to use Background colour with detailed steps.



Explain the CSS Border to the students and their properties:

- Border Style
- Border Colour
- Border Width

Tell the students about these in detail:

- CSS Margins
- CSS Height and Width
- CSS Outline

Explain the purpose of CSS Font to the students and their properties like:

- Font Family
- Font Style
- Font Size

Tell the students about Align Text and CSS Float with their detailed usage.

Extension

Ask the students some oral questions based on this chapter.

- Q. What is CSS?
- Q. What is Selector?
- Q. What is Link Style Sheet?
- Q. What is the purpose of Background Color?
- Q. What is CSS Border?
- Q. Explain CSS Height and Width.
- Q. Explain CSS Outline.
- Q. What is CSS Font?
- Q. How to Align text in CSS?
- Q. What is CSS Float?

Evaluation

After explaining the chapter, let the students do the course book exercises given on Pages 93, 94 and 95 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 95 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to create a web page to publish blogs and use CSS concepts.

9. Web Publishing

Teaching Objectives

Students will learn about

🖨 Web Hosting Service Providers

🖨 Types of Web Hosting

Teaching Plan

Number of periods: 3

While teaching this chapter, tell the students web publishing is a process through which you can upload and update your web pages on the Internet. It is also known as web hosting or online hosting.

Tell the students about the web hosting service providers.

Explain the students about the types of Web Hosting:

- Shared Web Hosting
- VPS Web Hosting
- Dedicated Web Hosting
- Self-Service Web Hosting

Extension

Ask the students some oral questions based on this chapter.

- Q. What is web publishing?
- Q. What is web hosting?
- Q. Define web hosting service providers.
- Q. Define types of web hosting.

Evaluation

After explaining the chapter, let the students do the course book exercises given on Page 98 of the main course book as Exercise.

In Creative Assignment, activities like In The Lab given on Page 98 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

Suggested Activity

Ask the students to learn more about web publishing and hosting.

