

# Video Editing with DaVinci Resolve worksheet with notes

## Part 1: Overview

### 1. Knowing important video concepts

1. **\_\_\_\_\_show:** Video is slideshow of still images (frames) in quick succession
2. **FPS:** 24 FPS is standard for live-action, but 30 FPS is okay;  
60+ FPS is better for animation or slow-mo live-action
3. **Full HD resolution:** 1920 pixels wide by 1080 pixels high

### 2. Exploring DaVinci Resolve

1. **Blackmagic**
2. **Standard vs Pro**
3. **Apps within app:** *Edit* and *Deliver* pages essential for general editing

### 3. Understanding file management

1. **Database vs Project vs Timeline:**  
Database has Project(s), Project has Timeline(s)
2. **Bins:** Customizable folders inside Projects
3. **Best practices:** Store all media files in one location (computer) and have copies somewhere else (cloud server)

### 4. Getting started

### 5. Exploring *Edit* interface

1. **Menu bar:** Has all actions, keyboard shortcuts (where applicable)
2. **Panels (*Media Pool, Effects, Mixer, Inspector*)**
3. **Preview**
4. **Timeline (playhead vs skimmer):** Resolve doesn't have skimmer for cursor
5. **Tracks vs Clips:** Tracks are horizontal lanes containing clip(s)

## Part 2: Video Basics

### 1. Importing & modifying primary video

1. **Zoom:** Frame dimensions stay fixed, but dimensions of shown image multiplied by input x-values (width) and y-values (height; x-/y-values linked by default)
2. **Rotation angle:** Rotate image clockwise/counterclockwise as needed/desired

### 2. Proxies

1. **Purpose:** Lighter versions of videos used for editing to ease burden on computer
2. **Setup (resolution, codec format, location):** Recommendation of half resolution, H.264 format, same location as media files
3. **Generating:** Right-click and select action to generate proxy
4. **Selecting:** Select prefer proxies from menu near top of preview area

### 3. Understanding essential controls

1. **Playback**
2. **Marking**
3. **Zooming in/out**

### Quiz: Playback shortcuts

1. **Play:** Spacebar or L
2. **Stop:** Spacebar or K
3. **Fast-forward:** (playing forward) L, (stopped) Shift + L  
**Fast-rewind:** (rewinding) J, (stopped) Shift + J
4. **Move ahead one frame:** Right arrow or hold K + press L  
**Move back one frame:** Left arrow or hold K + press J
5. **Skip to previous clip-start:** Up arrow  
**Skip to next clip-end:** Down arrow

## Part 3: Audio Basics

### 1. Modifying primary audio (dialogue)

1. **Track-level vs clip-level adjustments:** Clips within audio tracks might require separate adjustments
2. **Volume slider vs *Normalize Audio Levels* function:** Rely on decibel (dB) values in *Mixer* panel; *Volume* value in *Audio* tab of Inspector panel represents change to volume
3. **Ideal loudness:** Recommended peak/majority volume of  $-12$  dB ( $\pm 3$  dB)

### 2. Importing & modifying alternative to primary audio (dialogue)

1. **Manual alignment vs *Auto-Align Clips* function:** *Auto-Align* function (only) useful for separate yet simultaneous recordings of same audio-source - select all files and *Auto-Align* by waveform; otherwise set markers on prominent sounds/phrases and click-drag to align

### 3. Importing & modifying secondary audio (music)

1. **Fading in/out:** Point to top-left/-right corner of audio clip and drag polygon shape inward
2. **Ideal loudness:** Recommended peak/majority volume of  $-24$  dB ( $\pm 3$  dB) or double magnitude of primary audio level as starting point

## Part 4: Cuts, Transitions, & Effects

### 1. Cutting clips

1. **Edge-dragging vs cutting:** Blade tool allows cutting with cursor instead of playhead; keyboard shortcut creates cut at playhead for all (selected) tracks/clips (not locked and with Auto-Track Selector enabled)
2. **Color-coding:** Useful for identifying clips of interest for later actions (deletion, effects, B-roll)

### 2. Deleting clips

1. **Delete vs Ripple Delete:** Regular deletion preserves empty space; Ripple delete moves all (selected) tracks/clips (not locked with Auto-Track Selector enabled) leftward to occupy space

### 3. Adding effects

1. **Transitions: Outside vs overlapping vs inside:** Transitions at ends of clips have outside/overlapping/inside options (*Transition* tab in *Inspector* panel); difference is start/end of effect
2. **Titles:** Consider readability of text; if applicable use white text with black stroke (border)

### 4. Adding secondary video/imagery

1. **Editing on canvas vs marking in/out:** Marking in/out of clip from *Media Pool* allows selected section (instead of entire clip) being added to canvas/timeline
2. **Zoom:** Consider original resolution (dimensions) of image/clip; avoid zooming-in/expanding too much
3. **Position:** Positive x-value moves image to right, positive y-value moves image upward
4. **Crop**
5. **Keyframes:** Click diamond icon next to attribute set keyframe/point-of-interest for said attribute; consider marking clip at given frame for easier reference

## 5. Modifying clips

1. **Speed:** Select *Ripple Timeline* for slowed-down/sped-up clip to expand/contract, but unlocked tracks affected; avoid slowing clips to anything below (equivalent of) 24 FPS
2. **Direction**
3. **Freeze-frame:** Shift + R; cannot freeze frames at very start or very end of clip

## Quiz: Editing shortcuts

1. **Set maker:** M
2. **Cut selected/selectable/unlocked clip(s):** Ctrl/Cmd + B or B (to select Blade tool) then click
3. **Mark-in clip in *Media Pool*:** I
4. **Mark-out clip in *Media Pool*:** O
5. **Ripple delete:** Shift + Backspaces or (if applicable) Delete

## Part 5: Handoff & Delivery

- 1. Exporting Resolve files:** Accessible through *File* menu
  - 1. Projects:** Files with extension .DRP (DaVinci Resolve Project)
  - 2. Timelines:** Files with extension .DRT (DaVinci Resolve Timeline)
  - 3. Stills:**
  
- 2. Importing Resolve files:** Accessible through *File* menu or 'house' icon in lower-right corner of interface; open after importing
  
  
- 3. Re-linking media files:**

Project/Timeline files only reference linked specified media; opening Project/Timeline files imported to different computer requires re-linking media; right-click 'missing' file(s) in *Media Pool* then select *Relink Media* action or click (red) chain icon
  
  
- 4. Rendering video**
  - 1. Resolution [and Frame rate]:** Recommended 1920 x 1080 pixels and 24 FPS (live-action), but avoid higher values than Timeline settings
  - 2. Codec:** H.264
  - 3. Other settings:** MP4 format for video, set Quality to Restrict to [80000] kb/s