

ICT Tools *For* Science

**AR / VR/ Simulations /
Virtual Labs**



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01

Usage Principles

What should be the way of integration





Share your experiences and reflections

Have you used AR/ VR/ Online Labs?


What are your observations? Gaps identified?

Chat/ Unmute to reply





Gaps and experiences

- Easy to understand
 - Repetitive. Self-paced
 - Interesting
 - Tangible but abstract
 - Practical experience missing
 - Seriousness and reality missing
 - Skills missing
- 



Concept 1

DIY follow-up



Concept 2

Critical thinking



That is
YOUR
skill



STEPS

1. **PROD THINKING**
2. **EXPLORE AND SHARE**
3. **DIY ACTIVITES**





02 Websites and Apps

FOSS, Resources and
Freemium



DEMO



<https://phet.colorado.edu/en/simulations/browse>



<https://www.labxchange.org/library>



<http://mw.concord.org/modeler/showcase/>



https://www.labxchange.org/library/items/lb:LabXchange:5c7eb5b9:lx_simulation:1



https://activity-player.concord.org/?activity=https%3A%2F%2Fauth.ing.concord.org%2Fapi%2Fv1%2Factivities%2F10768.json&page=page_135736&runKey=cb8e4f2b-6965-41a6-8f56-334d671bd469

DEMO



<https://stellarium-web.org/>



<http://www.olabs.edu.in/>



<https://learninglab.si.edu/#sll-create>



<https://www.physicsclassroom.com/mmedia/newtlaws/efar.cfm> all

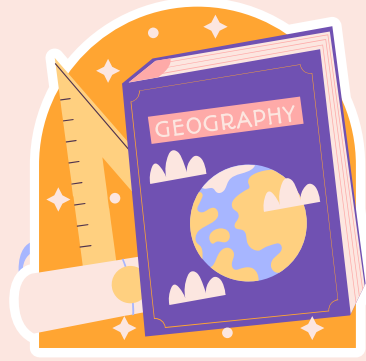
<https://edu.rsc.org/eic>



<https://www.pbslearningmedia.org/resource/lsp07.sci.phys.matter.ionicbonding/ionic-bonding/#.Wh73dVWnHIV>

Science:

It's not just the facts! It is to think!



<https://ajitadeshmukh.wordpress.com/>