STI 2D	SMART MUSEUM : Activité ETLV
ETLV	

1. Introduction

Museums and galleries have seen many changes over the years. Throughout the twentieth century their focus has shifted from collecting and conserving collections to presenting them in better ways, creating places of mass attraction, attention and spectacle. This wide spectrum of exhibition and spatial typologies has resulted in a variety of systems for climate control and lighting.

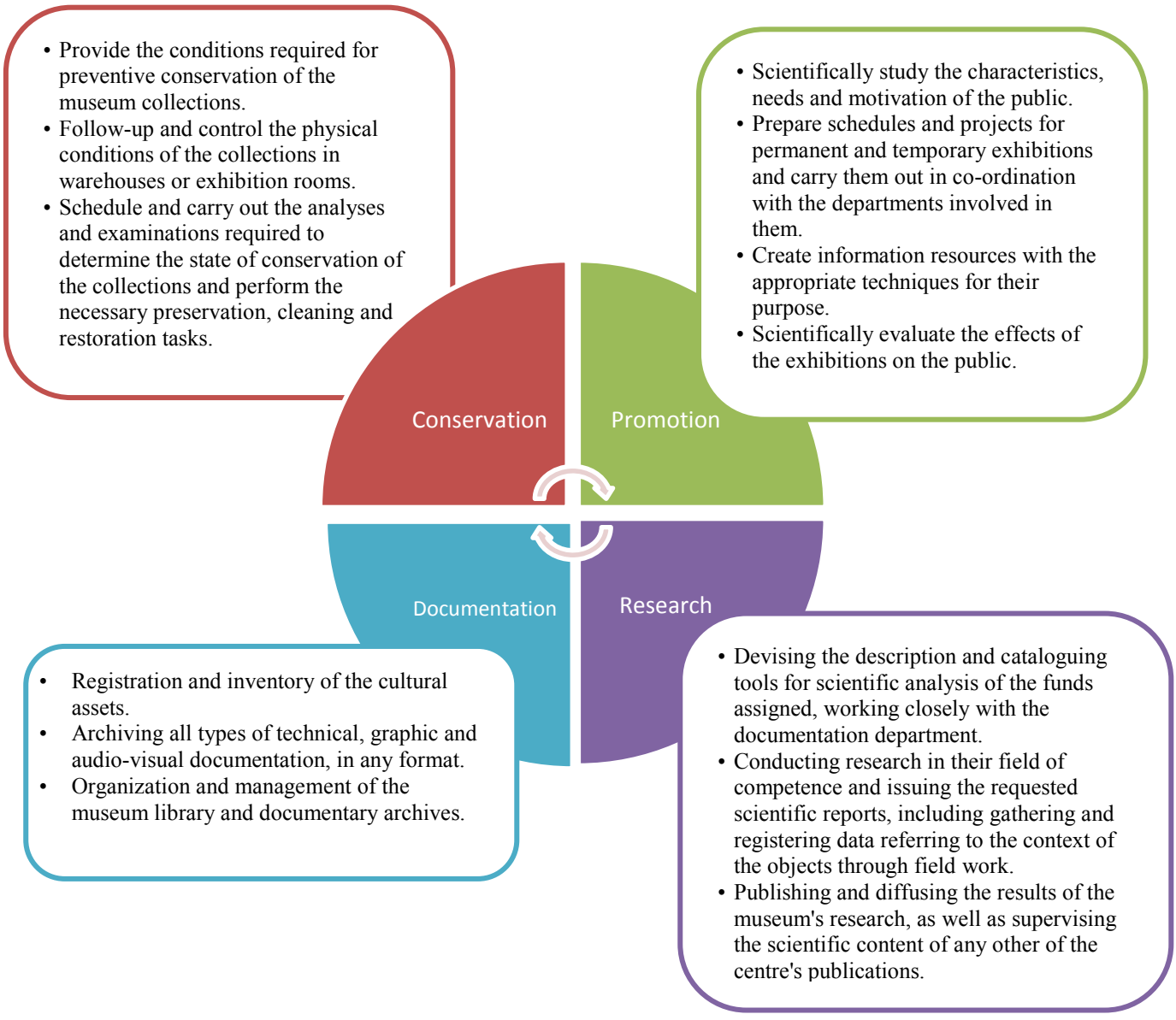
As energy efficiency and sustainability are major issues in today's economically challenged climate, the 'energy-hungry' museum and gallery sector are looking for ways to reduce their operating expenses and carbon footprint and improve their long-term sustainability by using appropriate technologies, products and systems.

Museum and gallery facilities are under increasing pressure to reduce their environmental impact and be run more efficiently, whilst the objective to provide the optimum environment for exhibition display continues to be the key interest.

The goal is to assist museums and galleries, provide sustainable building environments because viable, economically and environmentally sustainable methods of exhibition practice and collections care exist.

2. Activity 1 (Whole Class)

Comment on the role and function of museums.



3. Activity 2 : Automation and museum vocabulary

Match the words with their definitions.

a	Control panel	1	It's an invisible radiant energy, electromagnetic radiation with longer wavelengths than those of visible light, extending from the nominal red edge of the visible spectrum. Refers to invisible beams of light used in motion sensors to detect movement.
b	Relative humidity	2	A public display, as of the work of artists or artisans or objects of general interest.
c	Home automation	3	The keypad that controls the functions and features of a security system.
d	Infrared	4	An electromagnetic radiation with a wavelength shorter than that of visible light. Many pigments and dyes absorb UV and change colour, so paintings and textiles may need extra protection both from sunlight and fluorescent bulbs, two common sources of UV radiation.
e	Exhibition	5	Technology that lets homeowners control and create electronic schedules for lighting, thermostats, door locks and security systems.
f	A light-emitting diode (LED)	6	An integral component of a security system that detects movement, used to monitor for intruders.
g	Motion sensor	7	The amount of water vapor in the air, expressed as a percentage of the maximum amount that the air could hold at the given temperature.
h	A conservator	8	A two-lead semiconductor light source. It is a p–n junction diode, which emits light when activated. When a suitable voltage is applied to the leads, electrons are able to recombine with electron holes within the device, releasing energy in the form of photons.
i	Artwork	9	A wired or wireless video security device. Different varieties include bullet, dome, infrared/night vision, decoy and hidden cameras. Certain models are designed for indoor or outdoor use.
j	Ultraviolet (UV)	10	A person responsible for the repair and preservation of works of art, buildings, or other things of cultural or environmental interest.
k	Surveillance camera	11	An object made by a human being, of cultural or historical interest.
l	Preservation	12	A painting, sculpture, photograph, etc., that is created to be beautiful or to express an important idea or feeling : an artistic work.
n	A collection	13	Three dimensional artwork to be seen either in the round (from all sides) or as a bas-relief (a low relief in which figures protrude only slightly from the background).
m	An artifact (artefact – UK)	14	A group of accumulated paintings, documents, or artifacts grouped together by a particular theme.
o	Sculpture	15	The act or process of preserving, or keeping safe; the state of being preserved, or kept from injury, destruction, or decay; protect.

answers

a : …….. d : …….. g : …….. j : …….. n : ……..

b : …….. e : …….. h : …….. k : …….. m : ……..

c : …….. f : …….. i : …….. l : …….. o : ……..

4. Activity 3: group Work

Watch the videos on the links below and by group of 4 write your definition of museum automation.
https://www.youtube.com/watch?v=9DJr8QwgLEA

https://www.youtube.com/watch?v=2mxocMgUrvo

https://www.youtube.com/watch?v=Yg4NJFiGWJ8

YOUR CONCLUSION: Write your definition of smart museum:

……

……

……

……

……

5. Activity 3: Oral presentation

You are a salesperson for the firm “Automation Incorporation” and you must set up new display spaces in “The Imitation Game” exhibition room of the *Bletchley Park* (National Museum of computing). Requirements are to improve climate control and lighting conditions.

https://www.youtube.com/watch?v=mYqbp-Qnb1c

Energy efficiency and sustainability are major issues that The SMARTMUSEUM project supports by achieving the following general goals:

- preserving collections and artworks,
- improving climate control,
- improving lighting,
- increasing the energy efficiency,
- bringing comfort to visitors.

You must justify your choices. You will present your project to your client with a slideshow and explain how the different solutions you offer work.