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| **Séquence : Comment les objets communiquent-ils ?** | |
| **Éléments signifiants du socle commun observés :** | **Compétences disciplinaires travaillées :** |
| 4 - Concevoir des objets et systèmes techniques | 4 - Associer des solutions techniques à des fonctions. |
| 1.3 - Utiliser et produire des représentations d’objets | 2 - Comprendre le fonctionnement d’un réseau informatique. |

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| **Problématique : Comment cette enceinte peut-elle lire ma playlist préférée**  **sur mon site de streaming sans mon smartphone ?** |

**Enceinte SONOS One SL**

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|  | **Alimentation :** prise universelle 230V  **Audio :** deux amplificateurs peuvente traiter le signal avant d’être diffusé dans les hauts parleurs (un tweeter et un mid-woofer)  **Réseau :** sans fil (wifi) ou filaire (port Ethernet) |

1. **Mon avis :**

Cette enceinte peut lire ma playlist préférée sur mon site de streaming sans mon smartphone, car \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

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| Un peu d’aide !  Les **services de streaming** sont des bibliothèques musicales en ligne qui vous donnent accès à des millions de chansons. |

1. **Investigation :**
   1. **L’enceinte**

A quoi sert cette enceinte ? (Fonction d’usage) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

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| Un peu d’aide !  **Fonction d’usage :** un objet technique est conçu pour répondre à un **besoin**. La fonction d’usage répond à ce besoin. |

Compléter l’analyse fonctionnelle systémique de l’enceinte.

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| Un peu d’aide !  **Fonction technique :** une des actions que doit réaliser un objet technique pour assurer sa fonction d’usage. Elle s’exprime avec un verbe à l’infinitif.  **Solution technique :** Choix techniques retenus pour réaliser une fonction technique. |

Hauts parleurs (un tweeter et un mid-woofer)

Traiter

Communiquer

Boutons

Voyant

Alimenter

Protéger les composants

Boitier

**Fonction d’usage**

**Fonctions techniques**

**Solutions techniques**

* 1. **La télécommande :**

Il n’y a pas de télécommande avec l’enceinte pour la piloter à distance.

Il faut donc utiliser un autre objet de la maison (ordinateur, tablette, smartphone, assistant vocal).

Attention : au préalable, il faut associer votre service de musique préféré à l’application de l’enceinte.

L'avantage d'un service de streaming intégré est que la musique des enceintes ne provient pas de votre smartphone, mais directement d'Internet.

Pourquoi les autres objets de la maison peuvent-ils piloter mon enceinte ? \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

A quel réseau est connectée l’enceinte pour accéder à mon service de streaming musical ? \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

1. **Synthèse élève :**

**Mots clés :**  Fonction d’usage, Fonction technique, Solution technique, réseau, sans fil, filaire, Internet

J’ai fait : \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

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